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Open File Report 6103

Dayohessarah Lake Area High Density Regional Lake Sediment and Water Geochemical Survey, Northeastern Ontario

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ONTARIO GEOLOGICAL SURVEY

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Dayohessarah Lake Area High Density Regional Lake Sediment and Water Geochemical Survey, Northeastern Ontario

by

J.E. Jackson

2003

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Contents

Abstract vii
Introduction 1
Bedrock Geology 1
Physiography and Quaternary Geology 4
Sampling Methods 4
Sample Preparation and Analytical Methods 6
Quality Control Results 6
    Lake Sediments 9
    Lake Waters 9
Geochemical Data Interpretation 10
Discussion of Regional Geochemical Patterns 11
Description of Selected Anomalous Areas 12
Conclusions 23
Acknowledgements 23
References 24
Appendix A: Proportional dot maps of pH, conductivity, lake depth, Al, Ca, Mg, Ni, REE, Th and U in lake waters 25
Appendix B: Proportional dot maps of Ag, Al, As, Au (INAA), Au (FA), Ba, Be, Ca, Cd, Co, Cr, Cs, Cu, Fe, K, Li, LOI, Mg, Mn, Mo, Na, Nb, Ni, P, Pb, Pd, Pt, Rb, REE, Sb, Sc, Sr, Ta, Th, Ti, U, V, W and Zn in lake sediments 36
Appendix C: Selected lake sediment analyses for Ag, As, Au (INAA), Au (FA), Co, Cr, Cu, Fe, Ni, Pd, Pt, REE, Zn and LOI 77
Metric Conversion Table 102

FIGURES

1. Location map of the Dayohessarah Lake area lake sediment and water geochemical survey 2
2. Generalized bedrock geology of the Dayohessarah Lake survey area 3
3. Generalized Quaternary geology of the Dayohessarah Lake survey area 5
4. Location of selected geochemically anomalous areas 13
5. Land tenure map of the Dayohessarah Lake survey area as of September 2002 14
6. Sample site location map for the Dayohessarah Lake area lake sediment and water geochemical survey ..... back pocket

TABLES

1. Summary of elements analyzed by ICP, INAA and FA with quality control data including estimates of precision for the Dayohessarah Lake survey area, lake sediment dataset 7
2. Summary of elements analyzed by ICP-MS with quality control data including estimates of precision for the Dayohessarah Lake survey area, lake water dataset 8

Abstract

The Ontario Geological Survey (OGS) conducted a helicopter supported regional high density lake sediment and water geochemical survey of the Dayohessarah Lake area of northeastern Ontario during the summer of 2001. The study area is located approximately 90 km north of Wawa, Ontario and is the final part of a 2-year program to sample the Kabinakagami and Dayohessarah greenstone belts. Lake sediment and/or water samples were collected at 1467 sites in the Dayohessarah Lake area. The lake sediment and water samples were analyzed for a suite of more than 50 major and trace elements. Preliminary interpretation of the geochemical patterns has outlined 22 anomalous areas. The anomalous elements include: As, Au, Ni, Cu, Cr, Zn, Pb, Ag, Cd, Co, Mo and REE. The anomalous areas are loosely ranked in order of their exploration interest with most the significant anomalies associated with the supracrustal assemblages of the Dayhessarah greenstone belt. As of September 2002, the northern portion of the Dayohessarah greenstone belt was staked, however, large portions of the survey area were open for staking. The Dayohessarah Lake geochemical survey has generated several new exploration target areas for potential precious and base metal mineralization. Digital geochemical data for this survey has been released separately from this report as Miscellaneous Release—Data (MRD) 116.

Dayohessarah Lake Area High Density Regional Lake Sediment and Water Geochemical Survey, Northeastern Ontario

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Open File Report 6103
2003

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Introduction

A helicopter supported regional lake sediment and water geochemical survey of the Dayohessarah Lake area was conducted by staff of the Ontario Geological Survey (OGS) from July 9 to July 27, 2001. Dayohessarah Lake is located approximately 90 km north of Wawa, Ontario (Figure 1) and is situated within the middle of the Dayohessarah greenstone belt (DGB). The DGB lies between the Kabinakagami and Hemlo greenstone belts. The geochemical survey covered all of the Dayohessarah Lake greenstone belt and large portions of the surrounding granitoid terrain (Figure 2).

Lake sediment and water samples were collected from a 3600 km^2 region that wholly encompasses the area represented on National Topographic System (NTS) map sheet 42 C/15 and portions of NTS sheets 42 F/2, 42 F/3, 42 C/10, 42 C/11 and 42 C/14. Lake sediment samples were collected at 1383 sites, while lake water samples were collected at 1462 sites, for an average density of 1 sample per 2.5 km^2. This lake water and sediment geochemical survey is the final part of a 2-year project to sample the Kabinakagami and the Dayohessarah greenstone belts. A survey covering the Kabinakagami greenstone belt was completed during the summer of 2000 (Jackson 2002).

The Dayohessarah Lake area was also sampled in the late 1970s by the national geochemical reconnaissance (NGR) lake sediment and water program. The program was undertaken by the Geological Survey of Canada (GSC) and covered a large portion of northern Ontario with an average sample density of 1 sample per 13 km^2 (Friske et al. 1991).

Bedrock Geology

The Dayohessarah greenstone belt (DGB) is a north trending assemblage of Archean supracrustal rocks located within the Wawa Subprovince. The DGB is centered on Dayohessarah Lake and is situated between the Hemlo and Kabinakagami greenstone belts (*see* Figure 2). This greenstone belt may have been part of a continuous supracrustal sequence that connected the Hemlo greenstone belt to the Kabinakagami greenstone belt (Williams et al. 1991; Stott 1999). The Dayohessarah greenstone belt (DGB) is an arcuate shaped assemblage of dominantly mafic metavolcanic and metasedimentary rocks that extends over 35 km in length and up to 5 km in width. Massive-to pillowed amphibolitic-basalt forms the basal sequence of the greenstone belt. The basal metavolcanic unit is overlain by local spinifex-textured komatiitic flows and accompanying gabbro to peridotite intrusive bodies. These ultramafic rocks are overlain by intermediate to felsic metavolcanic-flows, pyroclastic rocks and rare sulfide-facies iron formations. The youngest sequence in the belt consists of clastic metasedimentary rocks that are interlayered locally with the underlying pyroclastic rock units and unconformably overlie the komatiitic flow units (Stott 1999).

The DGB is a tight syncline that plunges and opens southwards with the metasedimentary rocks occupying the core of the syncline (Stott 1999). Amphibolitic inclusions enclosed within granite pegmatite and granodioritic intrusive rocks are mapped at the southern and northern ends of the greenstone belt. These amphibolitic inclusion trains appear to discontinuously link the DGB with the Hemlo greenstone belt to the west and the Kabinakagami greenstone belt to the east. The DGB is bounded to the east by a crescent-shaped granodiorite intrusion (Strickland Pluton). The intrusion has superimposed a strain aureole on the DGB that increases in intensity from the middle to eastern edge of the belt. Felsite sills intrude amphibolitized basalt near the DGB and Strickland Pluton contact (Stott 1999).

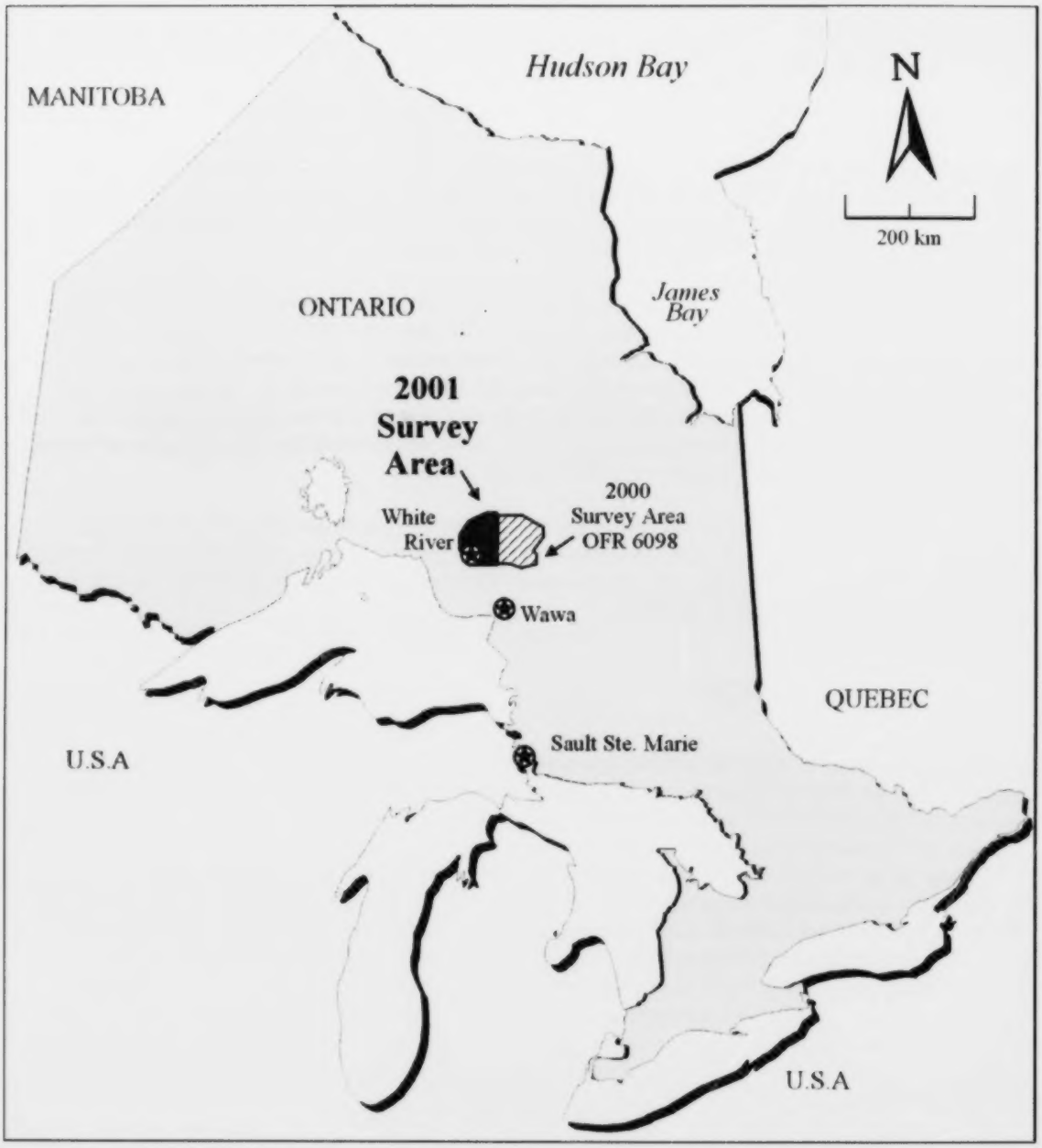

Figure 1. Location map of the Dayohessarah Lake area lake sediment and water geochemical survey.

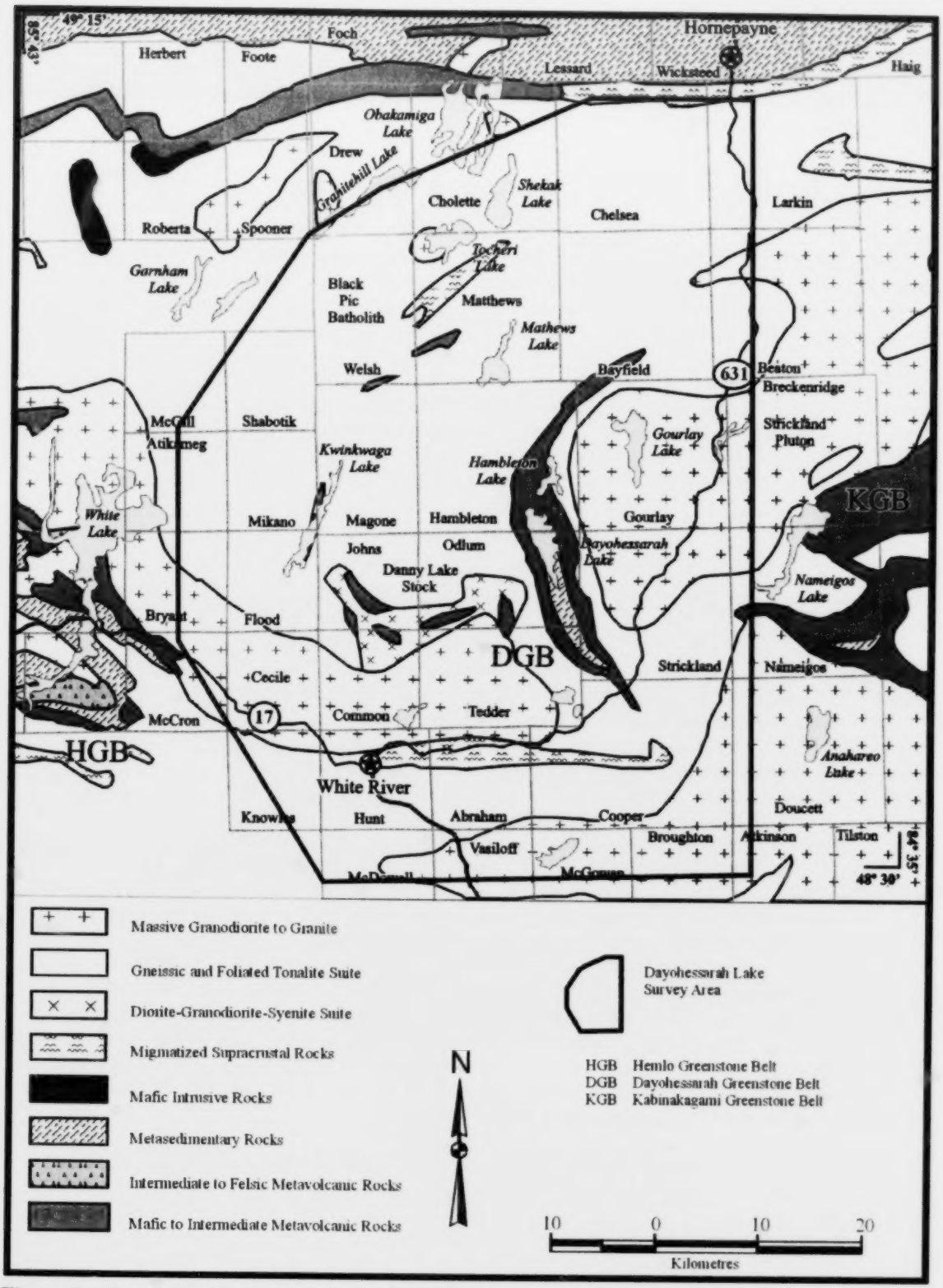

Figure 2. Generalized bedrock geology of the Dayohessarah Lake survey area. (after Ontario Geological Survey 1991).

Mineral exploration in the Dayohessarah Lake area has focused primarily on the discovery of gold deposits. The most significant of these was the 1991 discovery of a mineralized gold zone located east of Dayohessarah Lake. The zone is up to 40 m wide and 3500 m in length and is interpreted as a high strain zone hosting gold mineralized quartz veins and quartz-feldspar sills intruding amphibolitic basaltic flows (Stott 1999).

Physiography and Quaternary Geology

Most of the topography in the study area is of moderate relief with much of the terrain being bedrock controlled. The northern portion of the survey area is a dominantly flat, swampy terrain with elevations ranging from 320 to 350 m above sea level (asl). The terrain is more rugged in the southern portion of the survey area with elevations ranging from 400 to 600 m asl.

A regional compilation of the Quaternary geology (Barnett et al. 1991) indicates that a significant portion of the bedrock in the study area is covered by a thin veneer of discontinuous glacial drift (Figure 3). A broad area of glaciolacustrine and recent organic deposits occurs along the Shabotik River in the north (Gartner and McQuay 1980). A large area southwest of Dayohessarah Lake is covered by glaciofluvial and till deposits. Sand and gravel from outwash and ice-contact deposits are found in areas of low relief and along some of the river channels in the south. Esker deposits occur in ridges from 15 to 20 m in height and trend in a south to southwesterly direction.

Sampling Methods

Where possible, organic lake sediment and water samples were collected at each lake site by 2-person teams using a float-equipped helicopter. If a site contained no organic component (e.g., sand and/or clay), then only a water sample was taken. The organic sediment was collected in a gravity corer that was lowered from the helicopter float and then pulled to surface. Collected sediment was then deposited into a sample bag. The upper 20 cm of the sample core was discarded to avoid anthropogenic bias in the geochemical data and to avoid water/sediment interface effects (i.e., increased Mn due to anoxic conditions that result in secondary accumulation of base metals). The sediment below the 20 cm depth better reflects the natural element abundance that may be attributed to the local geology. Each sample was then sealed in an airtight plastic bag in order to avoid contamination between samples.

Lake water samples were collected at a depth of 0.5 m, below surface, from shallow lakes (<3 m deep) and at a depth of 2 m from deep lakes (>3 m). A semi-automated water sampling apparatus, developed by the OGS, was utilized for water collection. The apparatus consists of a submersible pump, a flow cell (for measurement of parameters such as pH, conductivity, oxidation-reduction potential and dissolved oxygen), a sample bottle tray and various hoses and pinch valves. Water is pumped from the lake and allowed to purge the sampling system prior to collection of a 250 ml water sample and the recording of water quality parameters. Water samples were kept cool after collection for a period of less than 24 hours, filtered into 60 ml bottles using 0.45 µm syringe filters and preserved by acidification to 1% ultrapure nitric acid.

At each site, sediment descriptions and observations were logged into a database on a pen based notebook computer. The pH, temperature, conductivity, oxidation-reduction potential and dissolved oxygen of the water samples was recorded on a YSI water quality analyzer and a GPS waypoint for the sample sites was taken.

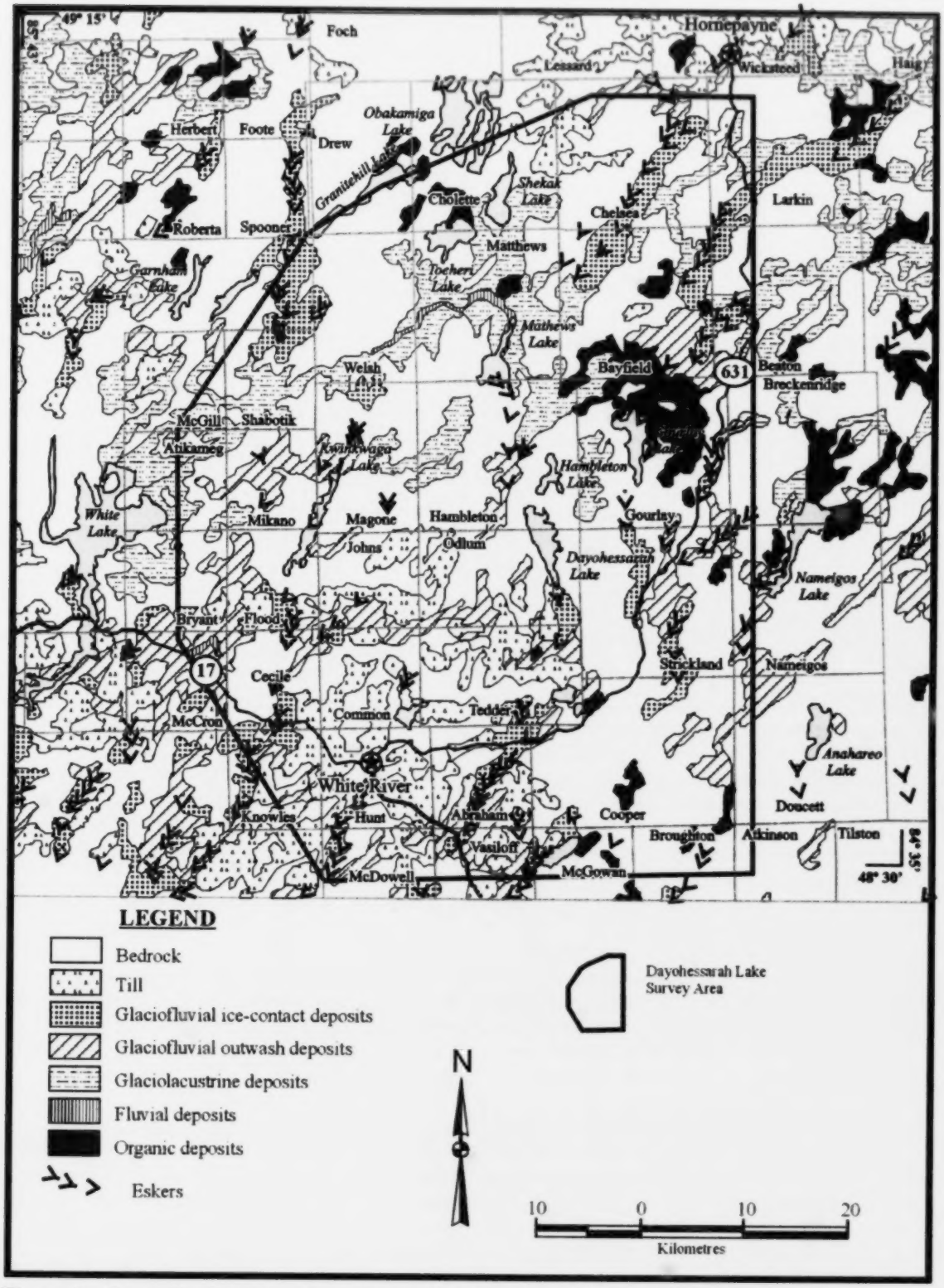

Figure 3. Generalized Quaternary geology of the Dayohessarah Lake survey area. (after Barnett et al. 1991).

Sample Preparation and Analytical Methods

Lake sediment samples were placed in breathable fabric bags and partially air dried prior to being shipped for laboratory analysis. A total of 1383 sediment samples were submitted for analysis. Final drying was done in an oven with temperature not exceeding 40 degrees C. Dried samples were disaggregated using a ceramic ring and puck pulverizer and then sieved to obtain the <80 mesh (<177 μm) size fraction.

Approximately 10 g of sample pulp were pressed into briquettes and analyzed by instrumental neutron activation analysis (INAA) for Au, As and a suite of 25 other elements. Enough material from the original 1383 samples was available to analyze 1348 samples by this method.

Laboratory analysis for Pt, Pd plus Au was accomplished by lead fire assay followed by an ICP–MS (FA) finish on 15 g of material. There was sufficient pulp left over (after the INAA splits) to analyze 899 samples by the FA technique.

Quality control was monitored through the use of sample pulp duplicates and certified reference materials. Loss-on-ignition (LOI) was determined at 500°C, using an automated furnace gravimetric technique.

Water samples require no laboratory sample preparation. Analysis of water includes direct aspiration ICP–MS to determine approximately 48 elements including major cation and anion species. A total of 1462 lake water samples were submitted for analysis.

Quality Control Results

Every 10th lake sediment sample submitted for analysis was a quality control (QC) sample. The QC sediment samples consisted of analytical duplicates, certified reference standards (CRS) and an internal (OGS collected) bulk standard. Analytical pulp duplicates were prepared by halving 1 in 20 of the dried sample pulps and inserting them into the sample sequence. A total of 81 duplicate pairs were inserted into the sample sequence and used to calculate the estimate of precision shown in Table 1. CANMET certified reference standards (LKSD 1 and 4, Lynch 1990) and an OGS internal standard (MS-3) were also inserted as dried pulps between the sample preparation and analysis stages. Every 20th sample was either a CRS or an OGS internal standard. The 3 standards (LKSD-1, 4 and MS-3) were inserted alternately so that each was repeated every 60th sample. A total of 27 samples for each of the 3 standards were inserted into the sample sequence.

QC for lake waters also involved the alternate insertion of analytical duplicates and standards at every 10th sample. Analytical duplicates were split in the field from the same 250 ml sample bottle at the time of filtering. National Research Council river water standard (SLRS-4) and distilled water blanks were inserted into the sequence at every 20th sample. A total of 79 duplicate water samples were used to estimate the analytical precision shown in Table 2. The accuracy of the data was determined from 37 SLRS-4 and 45 distilled water standards.

Analytical precision for each element was determined by plotting duplicate data on an X–Y chart and determining the variation of 95% of the data from a 1:1 ratio. Accuracy was determined by plotting the sequential values returned for certified reference standards inserted in the batch against a vertical scale of concentration and comparing this with the "provisional values" (Lynch 1990) for the standards. The mean and standard deviation of values returned for each standard were also compared with the provisional values.

Table 1. Summary of elements analyzed by ICP, INAA and FA with quality control data including estimates of precision for the Dayohessarah Lake survey area, lake sediment dataset.

				Lake Sediment (n=1383)				LKSD-1 Reference Standard (n=27)			LKSD-4 Reference Standard (n=27)		
Element	Analytical Method	Units	MDL	Median	Range		Estimated Precision	Certified Value	Mean Q.C. Result	Coefficient of variation (%)	Certified Value	Mean Q.C. Result	Coefficient of variation (%)
					Min	Max							
Ag	ICP-MS	ppm	0.02	0.06	<0.02	6.93	±0.93	0.6	0.56	4.38	0.2	0.22	5.83
Al	ICP-OES	ppm	30	5679	<30	40753	±1165	41300	4543	7.11	31200	12903	5.20
As	INAA	ppm	0.5	2.7	<0.5	20	±1.0	40	38.1	5.48	16	16.6	3.45
Au	INAA	ppb	2	<2	<2	7	-	5	10	254.18	2	<2	75.00
Au	FA	ppb	0.9	<0.9	<0.9	48.8	±1.5	5	38.7	448.35	2	1.5	57.35
Ba	ICP-MS	ppm	1	50	8	360	±6	430	93	2.32	330	138	2.52
Be	ICP-MS	ppm	0.1	0.3	<0.1	1.8	±0.4	1.1	0.2	59.03	1	0.5	31.84
Br	INAA	ppm	0.5	39	<0.5	177	±2	11	12.0	25.3	49	52.8	2.37
Ca	ICP-OES	ppm	15	13626	2268	318867	±11815	77200	72909	2.85	12900	10007	3.00
Cd	ICP-MS	ppm	0.05	0.48	<0.05	1.85	±0.11	1.2	1.55	5.43	1.9	2.08	2.94
Ce	ICP-MS	ppm	0.03	27.3	<0.03	320.21	±8.61	27	17.12	5.43	48	37.1	4.77
Co	ICP-MS	ppm	0.05	3.14	0.4	46.67	±0.7	9	7.73	4.10	11	9.16	3.89
Cr	ICP-OES	ppm	4	15	<4	52	±3	12	14	5.19	21	21	5.67
Cs	ICP-MS	ppm	0.01	0.86	0.06	6.99	±0.2	1.5	0.54	5.34	1.7	1.12	4.92
Cu	ICP-OES	ppm	5	29	<5	213	±4	44	44	3.38	30	32	2.76
Dy	ICP-MS	ppm	0.05	1.75	0.05	11.57	±0.30	3.4	1.84	5.17	3.7	3.00	4.17
Er	ICP-MS	ppm	0.01	0.91	0.04	6.45	±0.19	-	1.02	7.21	-	1.70	4.19
Eu	ICP-MS	ppm	0.05	0.72	<0.05	4.56	±0.17	0.9	0.53	5.48	1.1	0.99	4.28
Fe	ICP-OES	ppm	5	5203	1027	180015	±1507	18000	20061	3.60	27000	27065	3.73
Ga	ICP-MS	ppm	0.05	1.32	<0.05	4.97	±0.37	-	2.12	6.40	-	4.23	5.01
Gd	ICP-MS	ppm	0.05	3.34	0.09	29.29	±0.68	-	2.56	5.17	-	4.31	3.90
Hf	ICP-MS	ppm	0.05	0.06	<0.05	0.52	±0.04	3.6	<0.05	43.02	2.8	<0.05	-
Hg	ICP-MS	ppm	0.05	0.1	<0.05	0.44	±0.04	110	0.10	14.80	190	0.19	7.00
Ho	ICP-MS	ppm	0.01	0.33	0.01	2.32	±0.05	-	0.37	6.77	-	0.60	4.05
K	ICP-OES	ppm	100	299	<100	2444	±149	9100	444	7.10	6600	935	5.7
La	ICP-MS	ppm	0.05	23.9	<0.05	273.25	±4.88	16	10.72	3.34	26	21.57	2.80
Li	ICP-MS	ppm	0.5	4.1	<0.5	27.7	±1.8	7	4.6	8.44	12	10.1	8.49
Lu	ICP-MS	ppm	0.005	0.12	0.01	0.8	±0.03	0.4	0.14	6.94	0.5	0.25	3.60
Mg	ICP-OES	ppm	20	1720	405	40301	±659	10300	6609	4.20	5400	4003	3.89
Mn	ICP-OES	ppm	1	72	9	8172	±38	460	446	3.61	430	431	3.51
Mo	ICP-MS	ppm	0.1	1.6	0.1	18.7	±0.2	12	10.2	2.88	2	1.82	5.15
Na	ICP-OES	ppm	10	64	19	875	±26	14800	317	10.68	5200	224	7.15
Nb	ICP-MS	ppm	0.05	0.69	0.07	2.46	±0.34	7	1.02	16.54	9	1.44	8.17
Nd	ICP-MS	ppm	0.08	22.5	0.43	233.68	±5.72	16	12.31	3.94	25	22.38	4.34
Ni	ICP-MS	ppm	0.5	11.5	2.5	198.5	±2.9	11	12.9	6.02	32	31.9	5.33
P	ICP-OES	ppm	50	604	190	5120	±62	-	777	2.97	-	1391	2.43
Pb	ICP-MS	ppm	0.05	4.43	0.36	62.98	±0.74	84	80.21	3.34	93	91.47	2.58
Pd	FA	ppb	0.9	<0.9	<0.9	3.4	-	-	<0.9	-	-	<0.9	-
Pt	FA	ppb	0.5	<0.5	<0.5	3.4	±1.1	-	2.43	296.00	-	0.55	108.03
Pr	ICP-MS	ppm	0.05	5.8	0.12	66.86	±1.2	-	2.93	3.80	-	5.65	2.72
Rb	ICP-MS	ppm	0.05	4.36	0.5	26.36	±1.37	24	3.64	4.69	28	10.44	4.81
S	ICP-OES	ppm	30	4859	230	28018	±701	15700	16484	3.25	9900	10115	2.93
Sb	ICP-MS	ppm	0.05	0.1	<0.05	1.43	±0.04	1.2	0.67	7.61	1.5	1.26	4.47
Sc	INAA	ppm	0.2	3.9	<0.2	12	±0.5	9	8.0	2.89	7	7.1	2.1
Sm	ICP-MS	ppm	0.05	3.67	0.09	33.68	±0.67	4	2.61	5.27	5	4.23	3.13
Sn	ICP-MS	ppm	0.5	<0.5	<0.5	2.6	±0.02	16	3.4	6.5	5	3.3	5.44
Sr	ICP-MS	ppm	0.1	19.3	5.1	182.2	±5.2	250	65.6	2.88	110	40.1	3.27
Ta	INAA	ppm	0.5	<0.5	<0.5	1.4	±0.6	0.3	0.6	55.11	0.4	<0.5	43.02
Tb	ICP-MS	ppm	0.05	0.38	<0.05	2.94	±0.08	0.6	0.34	5.34	1.2	0.56	3.38
Th	INAA	ppm	0.2	4.6	<0.2	37.6	±1.0	2.2	2.1	11.36	5.1	5.1	5.90
Ti	ICP-OES	ppm	3	122	11	647	±90	3010	390	11.69	2270	475	7.24
Tl	ICP-MS	ppm	0.05	0.16	<0.05	0.83	±0.02	-	0.22	3.51	-	0.44	2.99
Tm	ICP-MS	ppm	0.005	0.12	0.01	0.94	±0.03	-	0.14	7.98	-	0.25	4.69
U	ICP-MS	ppm	0.05	2.96	<0.05	157.03	±2.06	9.7	8.79	5.08	31	29.62	4.11
V	ICP-OES	ppm	5	12	<5	97	±4	27	23	5.39	32	34	4.00
W	ICP-MS	ppm	0.05	0.08	<0.05	1.71	±0.12	<4	0.69	28.06	<4	0.24	16.45
Y	ICP-MS	ppm	0.05	9.78	0.4	64.86	±1.84	19	10.79	4.90	23	16.98	3.31
Yb	ICP-MS	ppm	0.05	0.78	<0.05	5.67	±0.16	2	0.93	5.97	2	1.60	3.67
Zn	ICP-OES	ppm	2	56	9	327	±4	337	325	2.48	189	189	2.40
Zr	ICP-MS	ppm	0.1	2.4	<0.1	25.0	±1.0	134	1.9	13.83	105	1.0	15.11
LOI	Grav.	%	0.01	52.56	2.54	92.33	±1.79	23.5	22.48	1.17	40.8	40.26	0.93

Notes:

1. ICP-MS = Inductively Coupled Plasma - Mass Spectroscopy; ICP-OES = Inductively Coupled Plasma – Optical Emission Spectroscopy; INAA = Instrumental Neutron Activation Analysis; FA = Fire Assay.
2. MDL = Method Detection Limit.
3. Estimated precision at 95% confidence level; ICP-OES and INAA elements based on results of 81 duplicate pairs; ICP-MS based on 95 duplicate pairs and fire assay based on 58 duplicate pairs.
4. Coefficient of variation expressed as one standard deviation (68% confidence level) as a percentage of the mean.
5. LKSD-1 and LKSD-4 are Canmet certified reference materials. For ICP elements, quoted reference values for Ag, Cd, Co, Cr, Cu, Fe, Hg, Mn, Mo, Ni, Pb, V, Zn determined by partial digestion; all other ICP elements determined by total digestion. For INAA elements, values are by total digestion methods.

Table 2. Summary of elements analyzed by ICP-MS with quality control data including estimates of precision for the Dayohessarah Lake survey area, lake water dataset.

				Lake Water (n=1462)				SLRS-4 Reference Standard (n=37)		
Element	Analytical Method	Units	MDL	Median	Range		Estimated Precision	Certified Value	Mean O.C. Result	Coefficient of variation (%)
					Min	Max				
Ag	ICP-MS	ppb	0.05	<0.05	<0.05	0.23	-	-	<0.05	-
Al	ICP-MS	ppb	0.2	19.1	1.3	365.1	±11.5	54	53.8	10.2
Ba	ICP-MS	ppb	0.3	6.9	<0.3	37.0	±0.7	12.2	13.4	4.0
Be	ICP-MS	ppb	0.02	<0.02	<0.02	0.22	±0.01	-	<0.02	-
Ca	ICP-MS	ppb	60	18070	260	57853	±2902	6200	5685	8.3
Cd	ICP-MS	ppb	0.005	0.008	<0.00	1.059	±0.019	0.012	0.015	16.1
Ce	ICP-MS	ppb	0.001	0.036	0.001	2.73	±0.063	-	0.381	4.7
Co	ICP-MS	ppb	0.02	<0.02	<0.02	0.37	±0.01	0.033	0.03	13.4
Cr	ICP-MS	ppb	0.03	0.13	<0.03	5.2	±0.15	0.33	0.34	21.5
Cs	ICP-MS	ppb	0.05	<0.05	<0.05	0.33	±0.01	-	<0.05	-
Cu	ICP-MS	ppb	0.2	1.5	0.3	85.7	±5.4	1.81	2.7	27.0
Dy	ICP-MS	ppb	0.001	0.005	<0.00	0.098	±0.012	-	0.028	27.8
Er	ICP-MS	ppb	0.001	0.003	<0.00	0.042	±0.004	-	0.012	27.2
Eu	ICP-MS	ppb	0.001	0.004	<0.00	0.039	±0.002	-	0.013	9.6
Fe	ICP-MS	ppb	1	19	<1	628	±40	103	91	37.4
Gd	ICP-MS	ppb	0.001	0.007	<0.00	0.265	±0.007	-	0.047	9.3
Hg	ICP-MS	ppb	0.01	0.03	<0.03	1.19	±0.25	-	0.1	155
Ho	ICP-MS	ppb	0.001	0.001	<0.00	0.058	±0.011	-	0.008	95.3
La	ICP-MS	ppb	0.001	0.04	0.002	2.227	±0.038	-	0.305	4.2
Li	ICP-MS	ppb	0.02	0.68	0.03	6.26	±0.22	-	0.47	10.4
Lu	ICP-MS	ppb	0.001	<0.001	<0.00	0.034	±0.007	-	0.003	114.7
Mg	ICP-MS	ppb	15	4401	137	16485	±703	1600	1802	13.9
Mn	ICP-MS	ppb	0.2	0.8	<0.2	238.8	±1	3.37	3.4	9.5
Mo	ICP-MS	ppb	0.3	<0.3	<0.3	4.0	±0.22	0.21	<0.3	34.9
Nd	ICP-MS	ppb	0.003	0.038	<0.00	1.502	±0.033	-	0.282	6.1
Ni	ICP-MS	ppb	0.4	<0.4	<0.4	6.4	±0.24	0.67	0.7	9.6
Pb	ICP-MS	ppb	0.01	0.08	<0.01	2.05	±0.52	0.086	0.12	47.8
Pr	ICP-MS	ppb	0.001	0.009	<0.00	0.46	±0.007	-	0.073	4.3
Rb	ICP-MS	ppb	0.02	1.76	0.19	6.57	±0.2	-	1.59	6.3
Sb	ICP-MS	ppb	0.03	<0.03	<0.03	0.96	±0.02	0.23	0.28	5.5
Sc	ICP-MS	ppb	0.01	0.74	<0.01	8.74	±0.59	-	1.12	15.4
Sm	ICP-MS	ppb	0.001	0.006	<0.00	0.219	±0.005	-	0.059	6.9
Sn	ICP-MS	ppb	0.02	<0.02	<0.02	2.35	±0.07	-	0.02	93.7
Sr	ICP-MS	ppb	1	22	<1	77	±3	26.3	29	6.1
Tb	ICP-MS	ppb	0.001	<0.001	<0.00	0.024	±0.001	-	0.006	11.9
Th	ICP-MS	ppb	0.02	<0.02	<0.02	0.16	±0.02	-	<0.02	-
Ti	ICP-MS	ppb	0.01	0.37	0.04	2.47	±0.17	-	0.99	9.9
Tl	ICP-MS	ppb	0.01	<0.01	<0.01	0.28	±0.12	-	0.02	250.4
Tm	ICP-MS	ppb	0.001	<0.001	<0.00	0.032	±0.007	-	0.004	112.1
U	ICP-MS	ppb	0.001	0.076	<0.00	7.536	±0.302	0.05	0.045	26.3
V	ICP-MS	ppb	0.01	0.29	<0.01	1.91	±0.1	0.32	0.39	9.1
W	ICP-MS	ppb	0.1	<0.1	<0.1	0.8	-	-	<0.1	-
Y	ICP-MS	ppb	0.001	0.032	0.002	0.455	±0.012	-	0.143	5.9
Yb	ICP-MS	ppb	0.001	0.002	<0.00	0.051	±0.007	-	0.011	34.3
Zn	ICP-MS	ppb	0.5	3.3	0.6	85.0	±5.7	0.93	3.5	22.2
Zr	ICP-MS	ppb	0.1	<0.1	<0.1	16.8	±0.2	-	0.1	56.6

Notes:
6. ICP-MS = Inductively Coupled Plasma - Mass Spectroscopy.
7. MDL = Method Detection Limit.
8. Estimated precision at 95% confidence level; based on 79 duplicate pairs.
9. SLRS-4 = National Research Council, Saint Lawrence River Standard #4: certified reference standard.
10. Coefficient of variation at one standard deviation (68% confidence level).

Tables 1 and 2 contain a summary of the elements analyzed from the lake sediment samples and the lake water samples, respectively. The statistics include median, range, and coefficients of variation for the certified reference material and the estimates of precision obtained from sample duplicates. A complete listing of all the geochemical data used to prepare this table is contained in the Miscellaneous Release—Data (MRD 116) published separately from this report.

LAKE SEDIMENTS

The quality of the lake sediment data varies from element to element but, in general, is very good. Quality control (QC) assessment of the ICP–MS data indicated significant problems with Be and Hf. These elements should be treated with extreme caution. Minor QC problems were also detected in Hg, W and Zr from the ICP–MS dataset and in Ti from the ICP–OES dataset. All other ICP data included in Table 1 are of very good to excellent quality.

Some caution should also be used when interpreting Ta from the INAA dataset. This element shows significant noise in the QC standards and may contain falsely elevated or depressed analytical results throughout the sample sequence. Of the original 1348 samples submitted for INAA analysis, only 12 samples returned values for Au above the detection limit. The values range from 3 to 7 ppb Au and the precision of the data is difficult to access. The accuracy of the Au data is poor and is reflected in the high coefficients of variation as shown in Table 1.

Significant QC problems were detected in the fire assay (FA) dataset for Au, Pt and Pd. The problems with the data are partly reflected in the high coefficients of variation shown in Table 1. An analytical problem was also detected for Au, Pt and Pd from sample site 986 to site 1206. The data between this interval were deemed unacceptable and the values for Au, Pt and Pd were stripped from the dataset. The highest values obtained from the survey area for Pt and Pd are 3.4 and 3.4 ppb, respectively. The values for Pt and Pd are quite low and probably do not reflect anomalous concentrations of PGE elements in the survey area. Some caution should also be used when interpreting the Au values from this dataset. Of the original 899 samples submitted for FA, only 43 Au values were returned above the detection limit and only 4 Au values were returned above 7 ppb. None of these 43 Au values were corroborated by the INAA method or by sampling completed by the GSC (Friske et al. 1991).

LAKE WATERS

The QC methods detected several problems within the lake water dataset. Significant analytical drift is observed in Cu, Dy, Er, Fe, Hg, Ho, Lu, Sn, Ti, Tl, Tm, Yb, Zn and Zr. These elements should be treated with caution when determining anomalous concentrations from their values. Erroneously elevated values were detected from sites 113 to 203 and sites 307 to 338 for Dy, Ho, Lu, Sn, Tl and Tm. Values for these elements between these intervals may be falsely elevated and caution is advised. These same site intervals also indicate that values for Er, Fe, Yb and Zr may be depressed.

Geochemical Data Interpretation

Factors to consider when assessing the possible significance of an anomaly are as follows:

1) Correlation with geology

In mineral exploration, correlation with geology is the most important factor when assessing the significance of a surficial geochemical anomaly, however, its relative importance declines as the known level of detail of the geology declines. Since much of the survey area has never been mapped in detail, many of the geochemical anomalies will help focus and prioritize future geological investigations.

2) Multi-site anomalies

Multi-site anomalies provide separate verification of the "anomalousness" of a given area and provide some insurance against non-systematic errors in sample quality, collection, preparation or analysis. However, since samples are collected, prepared and analysed in sequence, a uniform and numerically sequential anomaly may be the result of a systematic analytical or sample preparation error. This might be expected to produce an apparent geographic grouping of fairly uniform concentrations in one, or possibly several, elements. As mentioned above, every effort has been made to detect this kind of problem but the user is reminded to consider all available data when assessing the importance of an anomaly.

3) Multi-element anomalies

Multi-element anomalies with geologically reasonable elemental assemblages are useful in assessing the importance of many anomalies. For example, Pt and Pd, which are relatively immobile in the surficial environment compared to base metals such as Cu, Cr, Ni, Pb and Zn, would not be expected to be found in anomalous levels in a lake sediment without an accompanying base metal signature. Gold on the other hand, can occur in quartz vein deposits with little or no associated base metals; therefore, a gold anomaly by itself can be significant. A gold anomaly with an associated base metal signature, however, may be even more significant. However, certain multi-element anomalies (e.g., Mo + Zn) can sometimes result from limnological factors (e.g., redox conditions related to deep lakes, relative level of organic material in the sediment).

4) Magnitude of the anomaly

The magnitude of an anomaly, perhaps surprisingly, is one of the least important assessment criteria. Magnitude depends not only on the size of a deposit but on its distance from the lake, the presence and effectiveness of sinks between the source and lake, the limno-geochemical conditions in the lake, the weatherability of the deposit and the character of the surficial deposits (i.e., level of carbonate). The weatherability depends on factors such as exposure and/or depth of burial and on the specific mineralogy of the source. All these factors combine to make magnitude an unreliable estimate of the importance of an anomaly except in extreme cases or in cases where multiple samples and/or media corroborate its importance.

5) Correlation with Surficial Geology

Unconsolidated deposits can, under certain circumstances, cause a greater impact on the chemistry of lake media than can bedrock. Carbonate materials within eskers and thick ice-contact stratified drift deposits often result in relatively hard, alkaline lake waters. This type of lake water provides a geochemical matrix for trace elements that is very different to that of most shield lakes which are mildly acidic and organic-dominated. In general, most metals are relatively immobile in such alkaline conditions, therefore geochemical anomalies might be considered more significant and possibly close to source.

Dilution or addition to the trace metal signature in sediments can occur due to the presence of fine-grained unconsolidated material such as clay. Often a spatial relationship can be seen between lake sediment anomalies and glaciofluvial deposits such as eskers. In general, the sample collection and preparation protocols employed by the OGS, when properly carried out, minimize the deleterious effects of exotic inorganic materials which may be present in the survey areas.

6) Redox conditions, lake depth and organic content

Not all spatial trends in geochemistry are due to lithological or mineralogical factors. The solubility of trace metals depends to a large extent on the geochemical matrix and in particular, on pH and oxidation–reduction (redox) conditions. Redox conditions in a lake are usually controlled by thermal conditions which, in turn, are controlled by lake morphology and lake depth. If conditions are suitable for an element to preferentially partition into the lake sediment, factors that may influence (enhance) the concentration of the element include the abundance of Fe, Mn and organic material. The mechanisms that may lead to "false anomalies" include sorption (scavenging) by hydrous oxides of Fe and Mn and the affinity of some elements to form organo-metallic complexes. Enrichment of some elements in the shallow (surface to 10 cm deep) sediment due to the upward migration and precipitation/concentration of Fe and Mn (and other trace elements such as Co, Pb, Mo and Zn originally co-precipitated with Fe and Mn) can occur.

The OGS sampling technique avoids the surface sediment and targets the deep (>20 cm) sediment thereby reducing/minimizing the effects Fe, Mn and base metal enrichment that may occur in the surface sediment, whether by redox cycling or by anthropogenic input. This assumes a similar sedimentation rate in all of the sampled lakes and that the lake sediments deposited over the past several hundred years are undisturbed. This may not always be true. Sedimentation rates can vary depending on the energy of and the input to the depositional environment. Other factors to consider are sediment slumpage/mudslides, the effects of wavebase and the activities of animals. Therefore, the inadvertent collection of some "mixed" (shallow and deep sediment) samples is unavoidable.

Discussion of Regional Geochemical Patterns

Proportional dot maps for pH, conductivity, lake depth, Al, Ca, Mg, Ni, total rare earth elements (REE), Th and U in lake waters are contained in Appendix A. Lake sediment proportional dot maps for Ag, Al, As, Au (INAA), Au (FA), Ba, Be, Ca, Cd, Co, Cr, Cs, Cu, Fe, K, Li, LOI, Mg, Mn, Mo, Na, Nb, Ni, P, Pb, Pd, Pt, Rb, REE, Sb, Sc, Sr, Ta, Th, Ti, U, V, W and Zn are contained in Appendix B. Selected analytical data for lake sediment samples are listed in Appendix C and all of the analytical data are included in the digital release of data (MRD 116).

The average values for pH and electrical conductivity (EC) collected from the survey area are 7.71 and 121.8 µS/cm, respectively. The pH values range from 5.46 to 9.42 and the conductivity values range from <10 to 603 µS/cm. The proportional dot diagrams for pH and EC of lake waters indicate that most of the more alkaline lakes with high EC values occur in areas underlain by glaciofluvial deposits. The plots of Ca and Mg in lake waters closely mirror this pattern, suggesting that these lakes contain higher levels of dissolved carbonates. The plots of As, Ca, Fe, Mg, Mn, Sr, V, W and Zn in lake sediments also display a similar pattern of anomalous values coincident with these glacial deposits, particularly in the central and northeastern portions of the survey area. The anomalous suite of elements obtained from these lakes appears to be related to the underlying glacial deposits and not to the underlying bedrock geology. Several of the anomalous areas listed below contain these and several other elements coincident

with glaciofluvial outwash, ice-contact and esker deposits. Lake sediment sampling completed by the GSC (Friske et al. 1991) also returned a similar pattern of anomalous Fe, Mn and As over these Quaternary deposits. Careful consideration of the data presented here, as well as from other sources, should be used when interpreting some of anomalies obtained from this survey area.

A large area located south and west of the Dayohessarah Lake greenstone belt displays a strong geochemical signature that may be related to the underlying bedrock geology. This anomalous area is defined by the geochemical plots for Al, REE, Th and U in lake waters and Al, Be, P, REE, Th and U in lake sediments. The area to the south of the DGB is underlain by the Tedder granite pegmatite (Stott 1999). The intrusion is composed of graphic granite with subordinate amounts of coarse biotite. The same geochemical signature was also obtained from lake sediment and water sampling completed by the GSC (Friske et al. 1991). The anomalous levels of elements in this area appear to be a reflection of the unique chemistry of the underlying bedrock geology.

The proportional dot plots of Pt and Pd in lake sediments should be used with some caution. The maximum values are 3.4 ppb for both Pt and Pd with over 97 % of the Pd values and 75 % of the Pt values below the detection limits. The PGE values are very near the detection limit and probably represent background scatter rather than anomalous concentrations. The values for Pd, and to a lesser extent Pt, display some correlation with Ni, Cu and Cr anomalies obtained from this survey and known occurrences of mafic to ultramafic rocks. Anomalous areas 1 (Dayohessarah Lake north), 2 (Dayohessarah Lake south), 3 (Odlum Lake), 4 (Lower Matthews Lake) and 12 (Namcigosis Lake) contain low values of Pt and Pd. These values are clearly associated with the base metal signature from the area, but may not represent anomalous concentrations due to discrete PGE mineralization.

Sodium in lake sediments displays a good correlation with the major highways in the survey area. Elevated to highly anomalous values of Na are obtained from numerous sites along the Highway 17 and Highway 631 corridors. These lakes also contain relatively high electrical conductivity values. It is possible that the salt applied to the highways has leached into the lakes and drainage systems along these routes.

Description of Selected Anomalous Areas

The following is a summary of most of the multi-element and/or multi-site base and precious metal anomalous areas from the Dayohessarah Lake survey. The first 9 anomalies are considered to be the most promising and most of these are associated with the supracrustal assemblages of the DGB. The anomalies are loosely ranked by size, known geology, known mineralization and magnitude and are indicated on Figure 4. There are also numerous single site/single element anomalies that occur throughout the survey area that are not listed below, but may warrant further investigation. The land tenure map, indicating staked and areas withdrawn from staking as of September 2002, is shown on Figure 5. The locations for all of the lake sediment sample sites are shown on Figure 6 (back pocket).

A "±" symbol used in the area description means that a particular element is present at elevated to anomalous levels in some, but not all, of the sample sites listed. The term "elevated" indicates analytical results above the 90th percentile, "anomalous" for results above the 95th percentile and "highly anomalous" for results above the 98th percentile. Where possible, the dots on the proportional dot diagrams were sized to represent the percentile intervals: <50th, 50th to 75th, 75th to 90th, 90th to 95th, 95th to 98th and >98th. Elements with a large proportion of analyses falling below the detection level or below the estimate of precision were plotted with fewer intervals.

Figure 4 Location of selected geochemically anomalous areas.

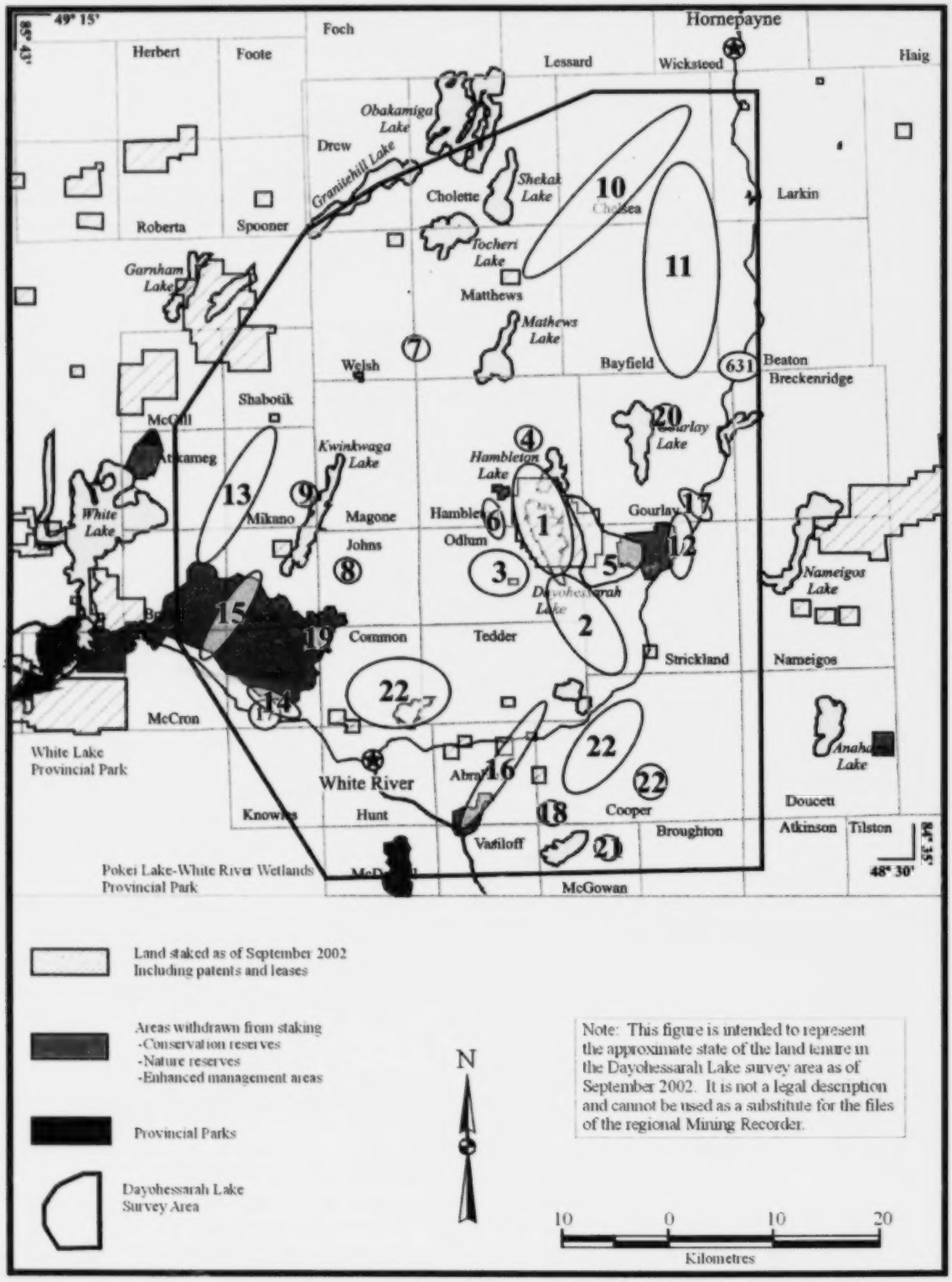

Figure 5. Land tenure map of the Dayohessarah Lake survey area as of September 2002.

1. Dayohessarah Lake (north) Ni, ±Cu, ±Cr, ±Co, ±Zn, ±Ag

Sites: 215, 269, 295, 314, 361, 626, 627, 785, 787, 818 to 820, 947, 948, 949, 950, 951, 952, 953, 954 to 957, 959, 960, 1064

These sites, located in the Dayohessarah Lake area, contain elevated to highly anomalous values of Ni ranging from 19.9 to 198.5 ppm. All of the samples listed above contain highly anomalous values of Ni except sites 215, 269, 626, 948, 949 and 956. Sites 952, 953, 954 and 950, located along the northwestern shore of Dayohessarah Lake, returned the 4 highest Ni values obtained from the entire survey area (198.5, 145.5, 95.7 and 84.2 ppm Ni, respectively). These 4 sites also returned elevated to highly anomalous values of Cu, Cr and Co. Sites 952 and 953 returned values of 52 and 44 ppm Cr, respectively, and represent the highest and 3rd highest Cr values obtained from the survey area. Sites 954 and 952 returned values of 16.89 and 12.90 ppm Co, respectively, and represent the 2nd and 3rd highest Co values of the survey area. Elevated to highly anomalous values of Ag and Zn were also obtained from sites 951, 952, 953 and 954. Some of the other sites listed above also contain elevated to highly anomalous values of Cu, Cr, Co, Zn and Ag. The Geological Survey of Canada (GSC) obtained similar anomalous Ni and Cu values from several lake sediment sample sites in the Dayohessarah Lake area (Friske et al. 1991).

Dayohessarah Lake is located in the central portion of the DGB and is underlain by metasedimentary rocks, mafic to intermediate metavolcanic rocks and ultramafic intrusive and extrusive metavolcanic rocks. The DGB forms a moderately flattened syncline with an axial plane trending south through Dayohessarah Lake (Stott 1999). Clastic metasedimentary rocks occupy the core of the syncline, which plunges and opens southward. Metavolcanic and metasedimentary units are mapped around the main fold closure at the northern end of Dayohessarah Lake. Komatiitic flow units have been mapped along the northern shore of Dayohessarah Lake. The flow unit is up to 650 m wide on a peninsula located in the northeastern portion of the lake and diminishes in thickness to the north of this location (Stott et al. 1995a). One small outcrop of ultramafic tuff breccia is located along the southern shore of a small lake where site 952 was collected. The anomalous values of Ni, and to a lesser extent, the anomalous values of Cu, Cr and Co, parallel the trace of the known outcroppings of intrusive/extrusive ultramafic rocks along the western, northern and eastern shores of Dayohessarah Lake. The proportional dot map of Ni in lake waters also shows elevated to highly anomalous values of Ni along the western, northern and eastern shore of the lake.

The geochemical pattern obtained from the present survey indicates a potential for base metal mineralization related to these underlying ultramafic rocks. As of September 2002, all of the area was staked.

2. Dayohessarah Lake (south) Ni, ±Cu, ±Zn, ±Ag, ±As, ±Cr, ±Co

Sites: 157, 182, 183, 184, 185, 189, 190, 193, 194, 195, 196, 198, 207, 214, 485, 516, 625, 1066, 1067, 1068, 1073

These sites are located south of Dayohessarah Lake and returned elevated to anomalous values of Ni. Sites 183, 185, 190, 193, 195, 196, 197, 198, 207, 516, 625, 1066 and 1068 also contain elevated to highly anomalous values of Cu ranging from 68 to 198 ppm. Several of the sites listed above contain elevated to anomalous values of Zn, Ag, As, Cr and Co. Very weak values of Pt and Pd were also returned from sites 193, 197, 516 and 625. Although the value is low, site 193 returned the 2nd highest value of Pd (3.3 ppb) from the survey area. Site 625 may contain falsely enriched values due to the presence of metal scavenging hydrous oxides of Fe and Mn.

The geochemical anomalies present in the southern portion of the DGB are a continuation of those obtained from the northern end of the belt. The main differences between the 2 anomalous areas are the lower values for Ni, Cr and Co and the lack of known outcroppings of ultramafic intrusive/extrusive rocks in the southern end of the DGB. The DGB is a southward plunging syncline and it may be possible that the lower values in this portion of the belt are a reflection of the deeper occurrence of the ultramafic rocks in this area. The geochemical anomalies obtained from the southern end of the DGB may indicate a potential for Ni-Cu mineralization related to ultramafic rocks. As of September 2002, the southern portion of the belt was open for staking.

3. Odlum Lake Cu, ±Ni, ±Cr

Sites: 933, 934, 937, 938, 939, 942, 986

Odlum Lake is located in central Odlum Township approximately 6 km west of Dayohessarah Lake. The area is underlain by quartz monzonite to quartz monzodioritic intrusive rocks of the Danny Lake Stock (Stott 1999). The sites listed above contain anomalous to highly anomalous values of Cu ranging from 87 to 173 ppm. Most of these sites also contain anomalous to highly anomalous Ni values ranging from 24.1 to 46.4 ppm. A value of 32 ppm Cr was returned from site 942 and very weak values of Pt and Pd were returned from sites 933 and 934. Anomalous values of Ni and Cu were also obtained in the Odlum Lake area from lake sediment sampling completed by the GSC in the late 1970s (Friske et al. 1991). The anomalous suite of elements obtained from the Odlum Lake area may indicate potential for Ni-Cu mineralization. As of September 2002, most of the area was open for staking. A small claim group was located approximately 1 km east of Odlum Lake.

4. Lower Mathews Lake Cu, ±Ni, ±Ag, ±Cr

Sites: 809, 810, 813, 815

Anomalous to highly anomalous values ranging from 91 to 131 ppm Cu were returned from 4 sites in the Lower Mathews Lake area. Site 813 returned elevated Ag and Cr with an anomalous Ni value. An elevated Ni value was also returned from site 815. Sites 809 and 813 returned low values of 3.4 and 2.1 ppb Pd, respectively. The Pd values obtained from these 2 sites represent the highest and 4th highest values from the survey area. The anomalies are located in the northern portion of the DGB at the contact between mafic metavolcanic and granodioritic intrusive rocks. Outcrops of gabbro and peridotite have been mapped in this area and are located approximately 1.5 km south of site 815 (Stott et al. 1995b). The Lower Mathews Lake area may contain potential for Ni-Cu mineralization related to mafic-ultramafic intrusive rocks. As of September 2002, there were no claims in the immediate area.

5. Dayohessarah Lake (east) Mo

Sites: 217, 218, 221, 223, 272, 273, 274, 291, 293, 294, 296, 297, 518

Numerous sites located along the eastern shore of Dayohessarah Lake contain elevated to highly anomalous values of Mo ranging from 4.0 to 13 ppm. Sites 217, 218, 291, 293, 296 and 297 all contain highly anomalous values of Mo. Site 218 returned the 2nd highest Mo value (13.0 ppm) from the survey area. The anomalies are underlain by granodioritic intrusive rocks of the Strickland Pluton (Stott 1999) along the contact with metavolcanic rocks of the DGB.

Sites 296 and 297 are located 1 km east of a known gold mineralized zone (Sugar Zone). The Sugar Zone consists of quartz veins within amphibolitic basalt flows injected by felsic sills. The zone trends northwest for up to 3500 m in strike length and is up to 40 m wide (Stott 1999). The quartz veins range from 2 to 45 cm wide and occur in sets, several metres wide across the zone. The veins contain visible gold with minor to trace amounts of pyrite, pyrrhotite, chalcopyrite, galena and sphalerite. A northwest trending chain of anomalous gold and sulphide bearing angular boulders lie to the west of the Sugar Zone. The boulders consist of quartz-rich metavolcanic rocks or felsic dikes that contain pyrite, arsenopyrite, molybdenite, galena and fuchsite (Stott 1999). Although no gold values were returned from lakes near the Sugar Zone in the present survey, the GSC did obtain several anomalous Au values along the eastern and northern portions of the DGB (Friske et al. 1999). The anomalous Mo values obtained along the eastern boundary of the DGB may warrant further investigation for potential Au mineralization. As of September 2002, most of the northern portion of the area was staked. The eastern portion of the anomalous area was covered by the Strickland River mixed forest wetland conservation reserve.

6. Odlum Twp. Mo, ±As, ±Cu, ±Sb, ±Zn, ±Cd

Sites: 971, 972, 974

Highly anomalous Mo values, ranging from 6.1 to 8.0 ppm, were returned from 3 small lakes in northern Odlum Township. Elevated values of Ni with anomalous values of As, Cu and antimony were returned from sites 972 and 974. Site 974 also returned highly anomalous values of Cd (1.16 ppm) and Zn (175 ppm). The value obtained for Zn at this site is the 2nd highest value returned from the survey area. The area is underlain by massive granodiorite and several outcrops contain xenoliths of amphibolitic mafic volcanic rocks (Stott et al. 1995a). The lake sediment samples from these sites are highly organic with LOI values ranging from 70.7 to 84.6 %. It is possible that the organic nature of these sediments is responsible for the anomalous values obtained from this area. Conversely, the presence of molybdenite, chalcopyrite, sphalerite and arsenopyrite associated with known Au occurrences from the Sugar Zone (east of Dayohessarah Lake) may indicate that the area warrants further investigation for potential Au mineralization. As of September 2002, the area was open for staking.

7. Cupa Lake ±Ni, ±Cu, ±Mo, ±Ag, ±Co

Site: 843, 844, 845

The sites associated with this area are located 2.5 km northwest of Cupa Lake along the boundary between Welsh and Matthews townships. Site 844 returned elevated values of Co and Ag, an anomalous value of Mo and highly anomalous values of Ni (30.4 ppm) and Cu (204 ppm). The Cu value is the 3rd highest value returned from the survey area. Site 843 returned an elevated value of Ni and site 845 returned a highly anomalous value of 9.6 ppm Mo. The area is mapped as foliated granodiorite and sites 844 and 845 are located near the contact with a large xenolith of amphibolitic mafic metavolcanic rocks. The geochemical signature obtained in this area suggests potential for base metal mineralization. An additional site (840), located east of Cupa Lake, returned elevated to highly anomalous values of Al, Cd, Co, Cr, Cu, Ni, Sc, V, Zn, Fe and Mn. The presence of Fe and Mn in this sample may indicate that metal scavenging processes are responsible for the anomalies at this site and caution is advised. As of September 2002, the area was open for staking.

8. Kwinkwaga River Ni, Cu, Cs, Co, Ag, Rb, Sc

Site: 926

This single site anomaly returned values of 42.1 ppm Ni, 201 ppm Cu and 3.3 ppm Cs. The values for Cu and Cs from this site are the 4th highest values obtained from the survey area. This site also returned elevated values of Rb and Sc with anomalous values of Co and Ag. The area is underlain by monzonitic to monzodioritic rocks of the Danny Lake stock. Small enclaves of mafic metavolcanic rocks are enclosed within the stock near this site. The base metal geochemical signature obtained from this site may indicate a potential ultramafic to mafic intrusive source rock, although, no known intrusions have been mapped in the area. As of September 2002, the area was open for staking.

9. Kwinkwaga Lake Cu, ±Ni, ±Ag, ±Mo

Sites: 1230, 1231, 1232

Elevated to highly anomalous values of Cu were returned from 3 sites along the northwestern shore of Kwinkwaga Lake in Mikano Township. Site 1231 returned an elevated Ag, anomalous Ni and highly anomalous Cu value (124 ppm). Site 1230 returned an elevated Ni with anomalous Cu and Mo values and site 1232 returned elevated values of Cu and Ag. The bedrock geology is mapped as gneissic tonalite and a large north trending enclave of amphibolitic mafic volcanic rock is mapped along the shore of Kwinkwaga Lake. The geochemical signature obtained from this area may indicate that a potential mafic to ultramafic source rock is responsible for the anomalies obtained from this area. As of September 2002, the area was available for staking.

10. Bayfield Lake Ba, Ca, Fe, K, Li, Mg, Mn, Na, Nb, Rb, Sr, Ti

Numerous sites in the Bayfield Lake area define a strong northeast trending anomaly containing the elements listed above. Some of the sites within this linear anomaly also contain Cr, Mo, Ni, Pb, P, Sb, V, W and Zn. A similar pattern of anomalous elements was also obtained by the GSC from this area (Friske et al. 1991). Most of the lakes along this trend are alkaline (pH >8.0) and contain high electrical conductivities. The lakes along this trend are underlain by glaciofluvial ice-contact deposits. The alkaline conditions and high electrical conductivities of these lakes indicate the presence of dissolved carbonate minerals (e.g., Ca, Ba, Mg) most likely related to the glacial deposits in this area. Many of the other elements along this trend may be falsely accumulated due to metal scavenging effects of hydrous oxides of Fe and Mn. The source of the Fe and Mn along this trend may originate from the Manitouwadge–Hornepayne greenstone belt and the Quetico Subprovince located north of the area. Large magnetic anomalies (Gupta 1991) located north of the Bayfield Lake area suggest the presence of banded iron formations. The anomalous suite of elements obtained in this area are likely attributable to the underlying Quaternary deposits and may not reflect a distinct geochemical signature of the Archean bedrock geology. Caution is advised when interpreting this anomaly. As of September 2002, no claims had been staked in the area.

11. West Larkin Lake As, Ca, Fe, Mn, Sr, Ba, Cd, Mo, Pb, P, Sb, V, W, Zn

Numerous sites in the West Larkin and Loon lakes area contain anomalous concentrations of the elements listed above. Many of these lakes are alkaline (pH >8.0) and contain high electrical conductivities. These lakes are underlain by glaciofluvial ice-contact deposits and probably indicate the presence of dissolved carbonate minerals derived from the Quaternary deposits. Some of these lakes also contain Fe and Mn which may indicate potential metal scavenging processes. The West Larkin Lake area is analogous to the Bayfield Lake area anomaly and caution is advised. As of September 2002, no claims had been staked in the area.

12. Nameigosis Lake ±Ni, ±Cu, ±Cr, ±Ag, ±As, ±Mo, ±Sc, ±Ba, ±Ca, ±Cs

Sites: 149, 224 to 228, 232

The Nameigosis Lake area is located in northern Strickland Township. Several sites in this area contain elevated to highly anomalous concentrations of the elements listed above. Elevated Cu and Ca were returned from site 149; elevated Cu, Ag and anomalous As were returned from site 224; elevated Cr and anomalous Mo were returned from site 225; elevated Cu, Cs with anomalous Ni, Mo and highly anomalous Cr (39 ppm) and As (8.9 ppm) were returned from site 226; highly anomalous values of Cu (173 ppm), Ag (0.25 ppm) and Sc (9.1 ppm) were returned from site 227; anomalous Mo with highly anomalous Ni (77.2 ppm), Cr (44 ppm), Ba (146 ppm) and Cs (2.9 ppm) were returned from site 228 and elevated Ni, Cr with anomalous Ba were returned from site 232. A value of 1.1 ppb Pd was also returned from site 228. The Pd value from this site is low, but is one of the higher values obtained from the survey area. The bedrock geology is mapped as massive granodioritic rocks of the Strickland Pluton. A small outcrop of olivine gabbro (diabase dike) is mapped very close to site 228 (Fenwick 1967; Santaguida 2001) and may be responsible for the mafic geochemical signature obtained from this area. A minor showing of molybdenite was also observed in the diabase dike by Fenwick (1967). Quaternary glaciofluvial outwash deposits underlie the sites in the Nameigosis Lake area. It is possible that the some of the elements obtained from these sites are related to the Quaternary deposits in the area. As of September 2002, most of the area was located within the Strickland River conservation reserve.

13. Bouchard Lake ±As, ±Cd, ±Co, ±Cr, ±Pb, ±Sb, ±Zn, ±Li, ±Mg, ±Rb, ±V, ±Fe, ±Mn

Sites: 1226, 1227, 1267, 1269, 1277, 1279, 1281, 1283, 1285 to 1287, 1325 to 1327, 1351, 1353, 1354

Bouchard Lake is located in Bryant Township along the southwestern edge of the survey area. Sites 1325, 1326 and 1327 are the most significant samples from the area, containing elevated to highly anomalous values of most of the elements listed above. These samples are from deep lakes and contain anomalous values of Fe and Mn. The samples may contain falsely elevated values due to scavenging by hydrous oxides of Fe and Mn. Sites 1226, 1279, 1281, 1283, 1286 and 1353 also contain anomalous values of Fe and Mn and caution should be used when interpreting all of these sites. The area is underlain by Archean foliated tonalite to granodiorite intrusive rocks and by Quaternary glaciofluvial outwash deposits. The lakes in this area are alkaline with pH values for the sites ranging from 7.37 to 8.65 and it may be possible that the underlying Quaternary deposits are responsible for some of the anomalies obtained in this area. As of September 2002, the Bouchard Lake area was open for staking.

14. Cecile Twp. ±Zn, ±Pb, ±Sb, ±Cu, ±Cr, ±Co, ±Cd, ±Ag, ±As, ±Cs, ±Fe, ±Mn

Sites: 1306, 1312, 1313, 1361, 1362, 1367, 1368

The Cecile Township anomaly is located approximately 12 km northwest of White River, Ontario. The most significant samples from this area are sites 1367 and 1368. These 2 sites contain elevated to highly anomalous values of Ag, Cd, Cs, Cu, Sb, Pb and Zn. Site 1368 returned the highest Pb value (62.98 ppm) of the survey area. Sites 1312 and 1313 may contain falsely elevated values due to the scavenging effects of hydrous oxides of Fe and Mn. The area is mapped as foliated massive granodiorite and sites 1367 and 1368 are underlain by glaciofluvial outwash and esker deposits. It may be possible that the underlying Quaternary deposits are contributing to the anomalies obtained from sites 1367 and 1368. The northern portion of Cecile Township is covered by the Kwinkwaga Ground Moraine Uplands conservation reserve. As of September 2002, the area around sites 1367 and 1368 was available for staking.

15. Flood Twp. ±As, ±Cd, ±Co, ±Cr, ±Cu, ±Pb, ±Sb, ±V, ±Zn, ±Ag, ±Cs, ±Fe, ±Mn

Sites: 1213, 1214, 1239, 1240, 1241, 1297, 1312, 1313, 1355, 1357

Several sites in the Flood Township area contain elevated to highly anomalous values of some of the elements listed above. The most significant sites in the area are 1213, 1241 and 1313 which contain elevated to highly anomalous values of As, Cd, Co, Cu, Sb, V, Zn, Cs and Ag. The sites are from deep lakes and also contain anomalous values of Fe and Mn. The values from these sites may be falsely elevated due to the scavenging effects of hydrous oxides of Fe and Mn. Glaciofluvial outwash deposits underlie most of the sites and it may be possible that the underlying Quaternary deposits are responsible for the anomalies obtained from these lakes. As of September 2002, the area was covered by the Kwinkwaga Ground Moraine Uplands conservation reserve.

16. Depew Creek ±Ag, ±As, ±Cd, ±Co, ±Cr, ±Cs, ±Cu, ±Li, ±Ni, ±Pb, ±Rb, ±V, ±Zn, ±Fe, ±Mn

Sites: 21 to 24, 58, 103, 104, 160, 264, 466 to 469, 471, 493, 497 to 499, 506, 1420, 1421, 1423, 1449, 1450

These sites define a northeast trending string of anomalies crossing Abraham Township, which is located in the southern portion of the survey area. The sites contain elevated to highly anomalous values of some of the elements listed above. Several of the sites are from deep lakes and may contain falsely elevated values due to potential metal scavenging of Fe and Mn oxides. These sites are all underlain by glaciofluvial ice-contact and outwash deposits. The geochemical anomalies obtained from the Depew Creek area may be related to the underlying Quaternary deposits and may not be related to discrete mineralization within the bedrock geology. The southern end of the anomaly is covered by the Kakakiwibik Esker conservation reserve and, as of September 2002, 3 small claims groups were located along the northern end of the trend.

17. Gourlay Twp. ±Ag, ±As, ±Ca, ±Cd, ±Cs, ±Cu, ±Li, ±Sb, ±Mo, ±Pb, ±Rb, ±Zn

Sites: 239, 240, 243, 244, 248 to 251, 260

This anomaly is located in the southeastern corner of Gourlay Township. These sites contain elevated to highly anomalous values of some of the elements listed above. Sites 248, 249 and 251 are the most significant samples from the area. Site 248 returned elevated values of As and Ca, anomalous Sb and highly anomalous Cd (1.07 ppm) and Pb (23.95 ppm). Site 249 returned elevated values of As, Sb and Zn with anomalous values of Ca, Cd, Mo and Pb. Site 251 returned an anomalous Mo value and highly anomalous values of Ag (0.38 ppm), Cs (2.39 ppm) and Cu (158 ppm). The Ag value from site 251 is the 2nd highest value returned from the survey area. The bedrock geology is mapped as massive granite to granodiorite of the Strickland Pluton. Glaciofluvial outwash, organic and esker deposits are also mapped in the area and may be responsible for the geochemical anomaly obtained in this portion of Gourlay Township. As of September 2002, the area was available for staking.

18. Cooper Twp. Au

Site: 1410

This site is located in the southwestern portion of Cooper Township. Site 1410 returned the highest Au (FA) value of 48.8 ppb from the survey area. A value of <2 ppb Au was returned from the same site by the INAA method. The GSC did not sample this site during a regional lake sediment and water survey (Friske et al. 1991). The area is underlain by tonalitic and granodioritic intrusive rocks. No known Au mineralization is known from the area. The lack of corroboration for Au values between the 2 analytical methods and the lack of favourable known geology, suggests that this sample site should be treated with caution. As of September 2002, this site was open for staking.

19. Lovedee Creek Au, Cu

Site: 408

A small lake located in the northeastern portion of Cecile Township returned a value of 17.1 ppb Au (FA), <2 ppb Au (INAA) and an elevated Cu value. This is the 2nd highest Au (FA) value returned from the survey area. The GSC also sampled this lake and returned a value of <2 ppb Au (Friske et al. 1991). The area is underlain by tonalitic and granodioritic intrusive rocks. The lack of corroboration between the 2 Au analytical methods, lack of corroboration with previous lake sediment sampling and the lack of favourable known geology, indicates that this anomaly should be treated with caution. The site lies entirely within the Kwinkwaga Ground Moraine Uplands conservation reserve.

20. Gourlay Lake Au, Ba, Cd, Mn, Zn

Site: 309

Site 309 is located in a small lake near the eastern shore of Gourlay Lake. This site returned the 3rd highest Au (FA) value (16.6 ppb) of the survey area. This value was not corroborated by the INAA method, which returned a value of <2 ppb Au. Site 309 also returned elevated values of Ba and Cd with anomalous values of Mn and Zn. The lake sediment sample from this lake was highly organic with an LOI of 83.12%. The underlying geology of the area consists of Archean massive granodioritic intrusive rocks overlain by Quaternary organic and esker deposits. The presence of Mn in this sample indicates that potential metal scavenging processes may be responsible for these anomalies. The sample may also be falsely enriched in Au due to the affinity of Au for organic rich material. The lack of corroboration of Au between the 2 analytical methods, lack of favourable known geology and potential false enrichment in the sample indicate that this anomaly should be treated with caution. As of September 2002, the area was open for staking.

21. McGowan Twp. Au, Fe, Mn, V, Th

Site: 1435

Site 1435 is located in northeastern McGowan Township and returned values of 8.3 ppb Au (FA), <2 ppb Au (INAA), elevated Th, anomalous Mn, V and highly anomalous Fe. The bedrock geology in the area is mapped as massive granodioritic rocks. The presence of Fe and Mn may indicate that potential metal scavenging processes are responsible for the anomalies obtained from this sample. The lack of corroboration between the 2 Au analytical methods, the lack of favourable known geology and potential false enrichment suggest that this anomaly should be treated with caution. As of September 2002, the area was open for staking.

22. White River area Al, Be, P, REE, U, Th, Ag

A large area located north and east of White River, Ontario contains elevated to highly anomalous values of the elements listed above. Many of the higher values from this anomaly occur in 3 clusters located in the central part of Common Township and the western and southeastern parts of Cooper Township. Most of the highest U values occur in central Common Township, approximately 7 km northwest of the town of White River, while many of the higher Th values occur in the western part of Cooper Township. The same regional trend of anomalies is also observed in Al, REE, Th and U from lake waters. Lake sediment and water sampling completed by the GSC in the late 1970s (Friske et al. 1991) also obtained anomalous values of REE, U and Th in this portion of the White River area. The bedrock geology of the area has been mapped as pegmatitic granitic intrusive rocks (Fenwick 1967; Stott 1999). The anomalous suite of elements obtained in this area reflects the unique chemistry of the underlying bedrock geology and may not indicate areas of discrete mineralization. As of September 2002, the area was open for staking.

Conclusions

The lake sediment and water geochemical survey of the Dayohessarah Lake area has identified 22 discrete anomalous areas. The anomalous elements include: As, Au, Ni, Cu, Cr, Zn, Pb, Ag, Cd, Co, Mo, and REE. The first 9 anomalous areas described above are considered the most promising for potential precious and/or base metal mineralization. As of September 2002, 1 of these areas was completely staked, portions of 2 areas were on open ground and 6 were available for staking. The results of this survey have generated several new targets for potential precious and base metal mineralization in the Dayohessarah area.

Acknowledgements

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References

Barnett, P.J., Henry, A.P. and Babuin, D. 1991. Quaternary geology of Ontario, east-central sheet; Ontario Geological Survey, Map 2555, scale 1:1 000 000.

Fenwick, K.G. 1967. Geology of the Dayohessarah Lake area; Ontario Department of Mines, District of Algoma, Geological Report 49, 16p., Accompanied by Map 2129, scale 1:126 720.

Friske, P.W.B., Hornbrook, E.H.W., Lynch, J.J., McCurdy, M.W., Gross, H., Galletta, A.C. and Durham, C.C. 1991. Regional lake sediment and water geochemical data, northwestern Ontario (NTS 42C, 42F south); Geological Survey of Canada, Open File 2362.

Gartner, J.F. and McQuay, D.F. 1980. White River area (NTS 42C/NW), District of Algoma and Thunder Bay; Ontario Geological Survey, Northern Ontario Engineering Geology Terrain Study 61, 18p., Accompanied by Map 5094 and 5098, scale 1:100 000.

Gupta, V.K. 1991. Shaded image of total magnetic field of Ontario, east-central sheet; Ontario Geological Survey, Map 2586, scale 1:1 000 000.

Jackson, J.E. 2002. Kabinakagami Lake area high density regional lake sediment and water geochemical survey, northern Ontario; Ontario Geological Survey, Open File Report 6098, 90p.

Lynch, J. 1990. Provisional elemental values for eight new geochemical lake sediment and stream sediment reference materials LKSD-1, LKSD-2, LKSD-3, LKSD-4, STSD-1, STSD-2, STSD-3 and STSD-4; Geostandards Newsletter, v.14, no.1, April 1990, p.153-167.

Ontario Geological Survey 1991. Bedrock geology of Ontario, east-central sheet: Ontario Geological Survey, Map 2543, scale 1:1 000 000.

Santaguida, F. 2001. Precambrian geology compilation series—White River sheet; Ontario Geological Survey, Map 2666, scale 1:250 000.

Stott, G., Mahoney, K.L. and Zwiers, W.G. 1995a. Precambrian geology, Dayohessarah Lake area (Central); Ontario Geological Survey, Preliminary Map P.3310, scale 1:20 000.

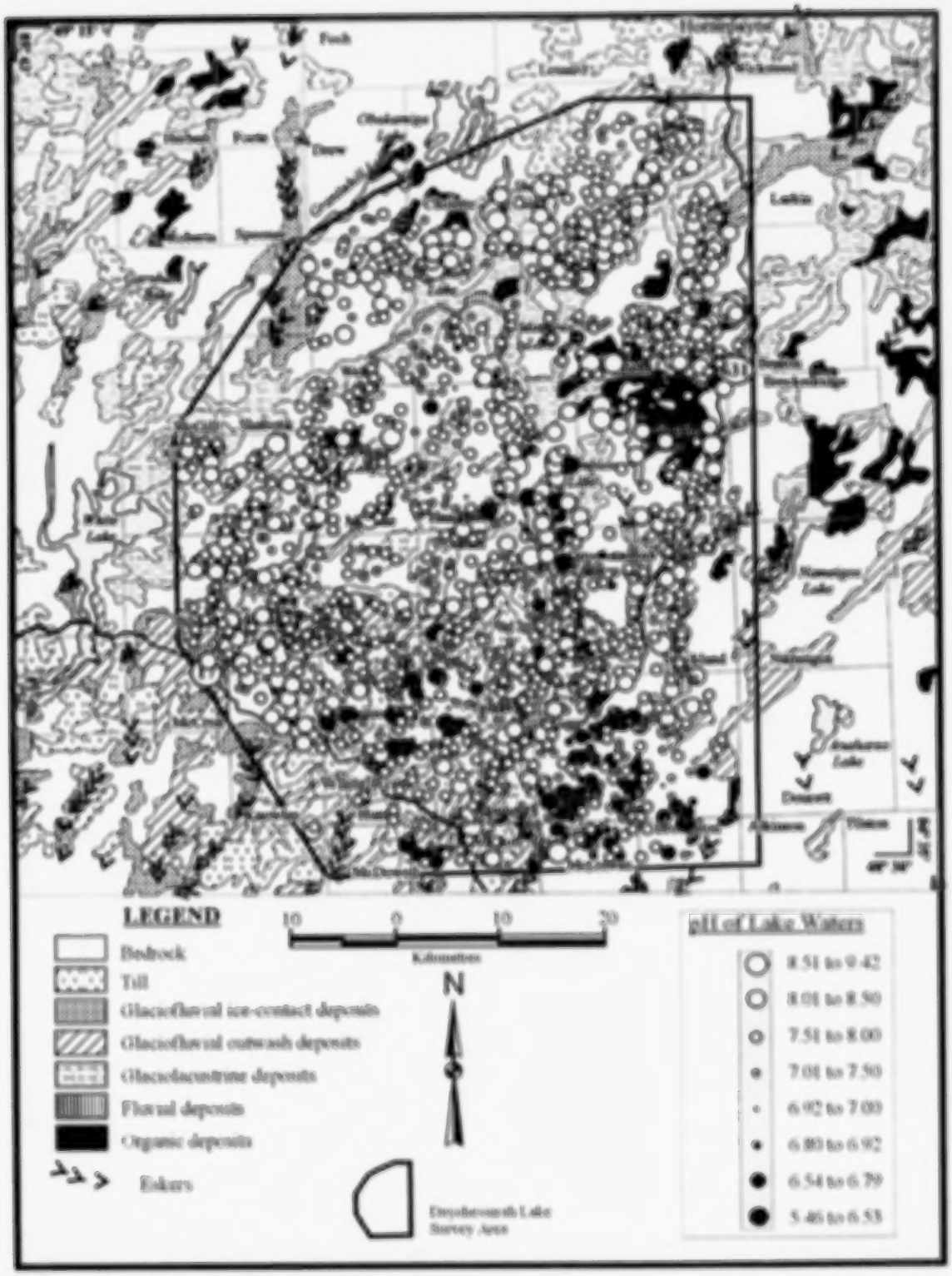
Stott, G., Mahoney, K.L. and Zwiers, W.G. 1995b. Precambrian geology, Dayohessarah Lake area (North); Ontario Geological Survey, Preliminary Map P.3309, scale 1:20 000.

Stott, G.M. 1999. Precambrian geology of the Dayohessarah Lake area, White River, Ontario; Ontario Geological Survey, Open File Report 5984, 59p.

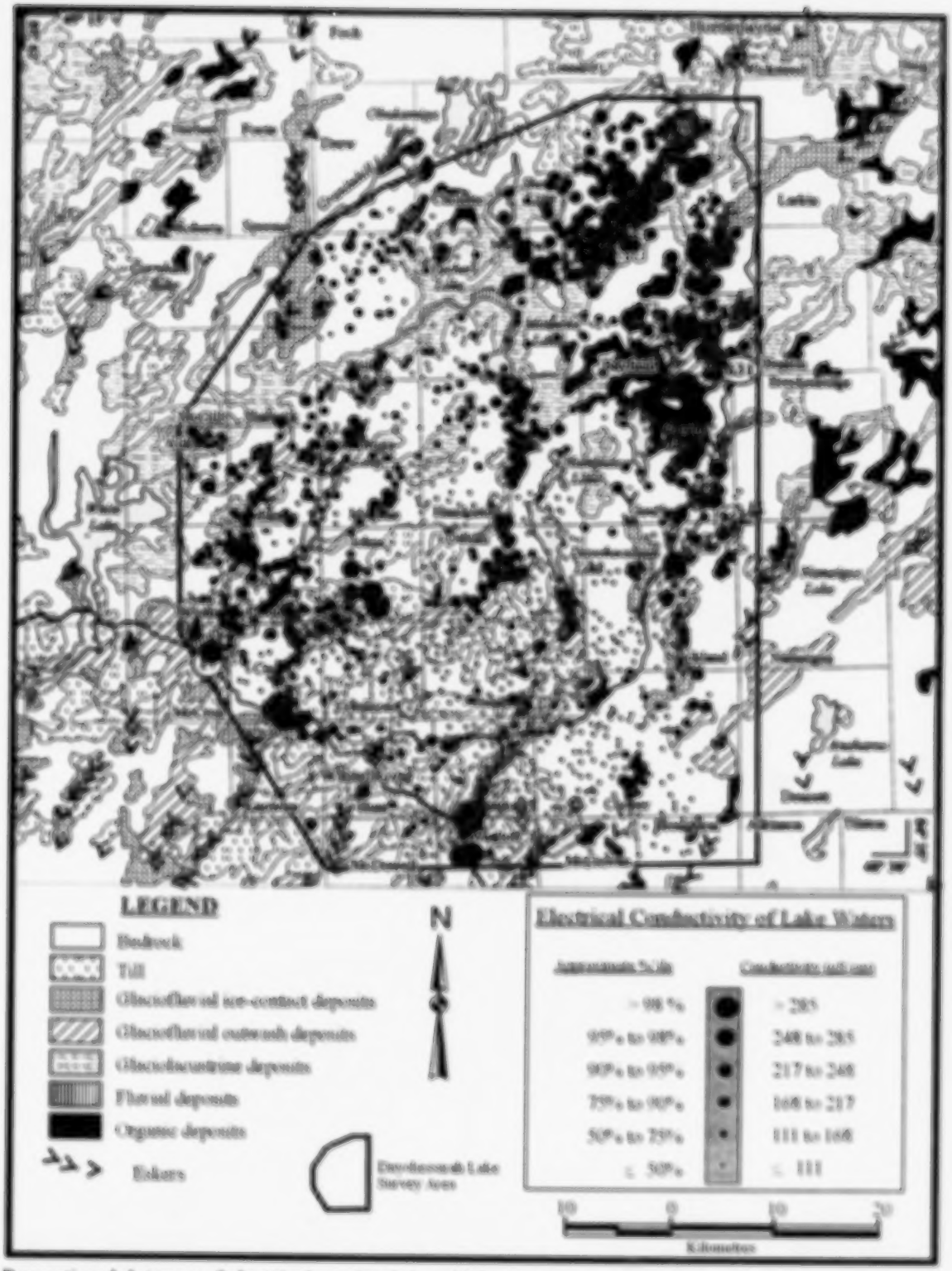
Williams, H.R., Stott, G.M., Heather K.B., Muir T.L. and Sage R.P. 1991. Wawa Subprovince; *in* Geology of Ontario, Ontario Geological Survey, Special Volume 4, Part 1, p.485-539.

APPENDIX A

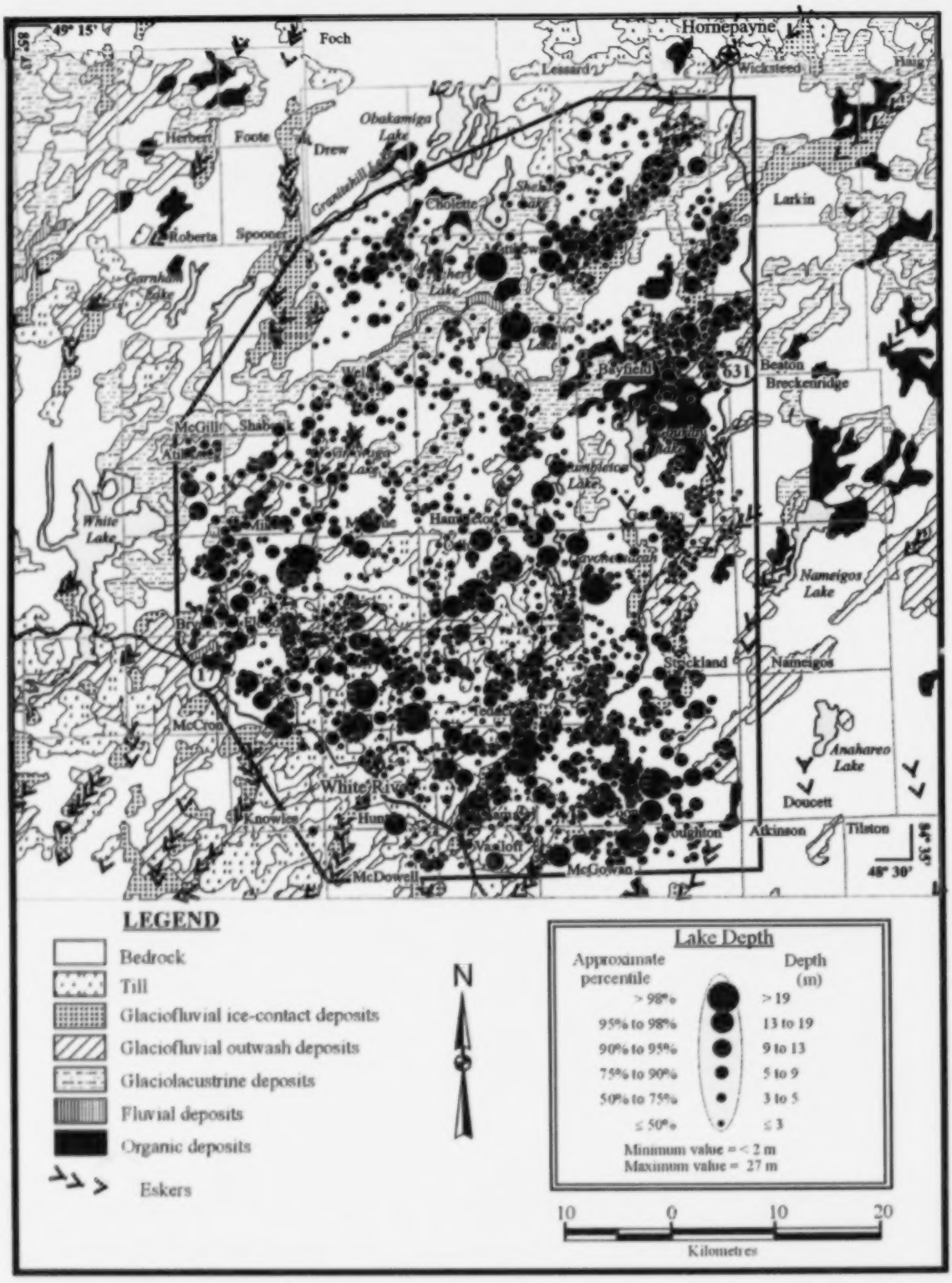
Proportional dot maps of pH, conductivity, lake depth, Al, Ca, Mg, Ni, REE, Th and U in lake waters



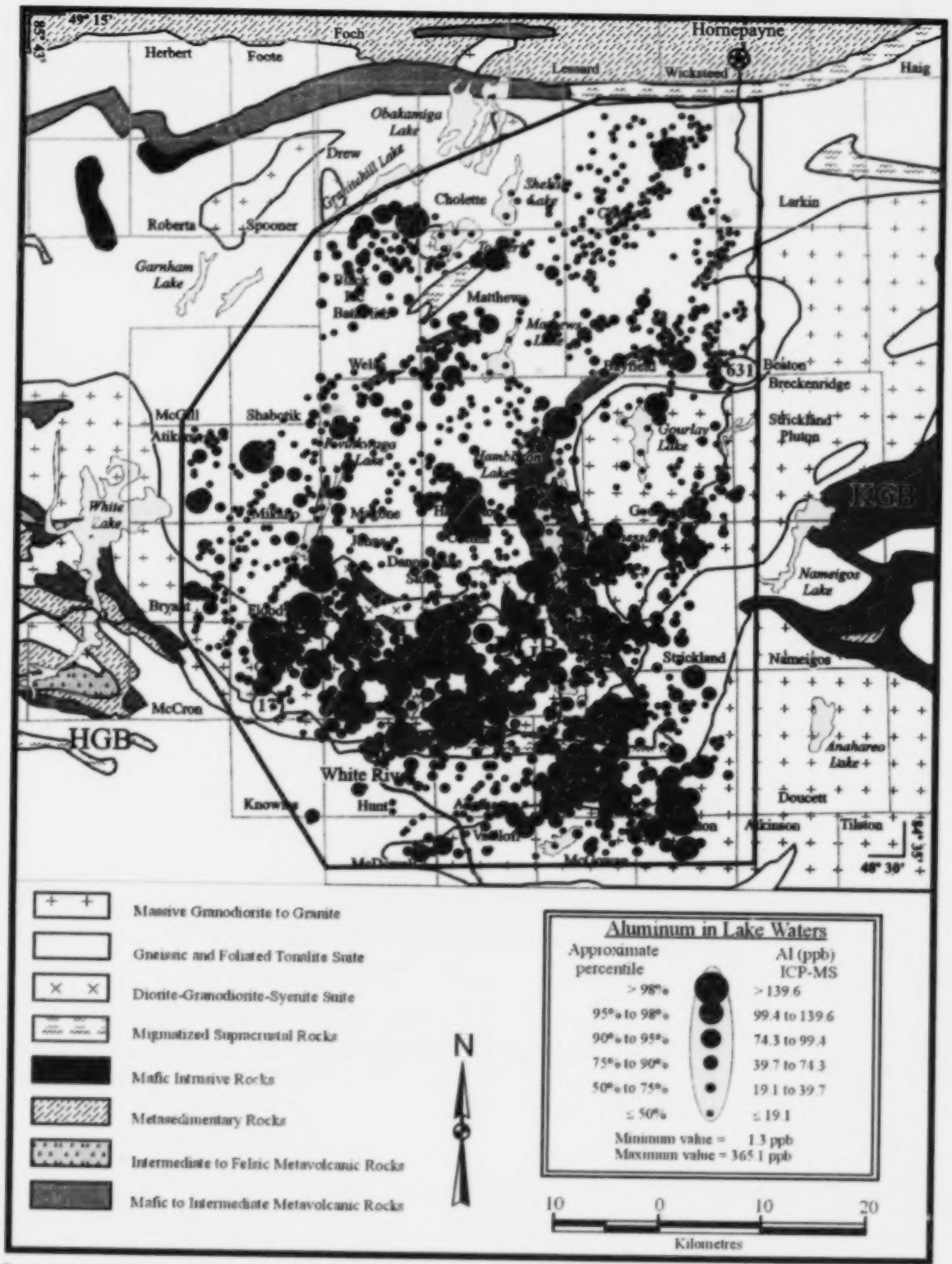
Proportional dot map of pH of lake waters



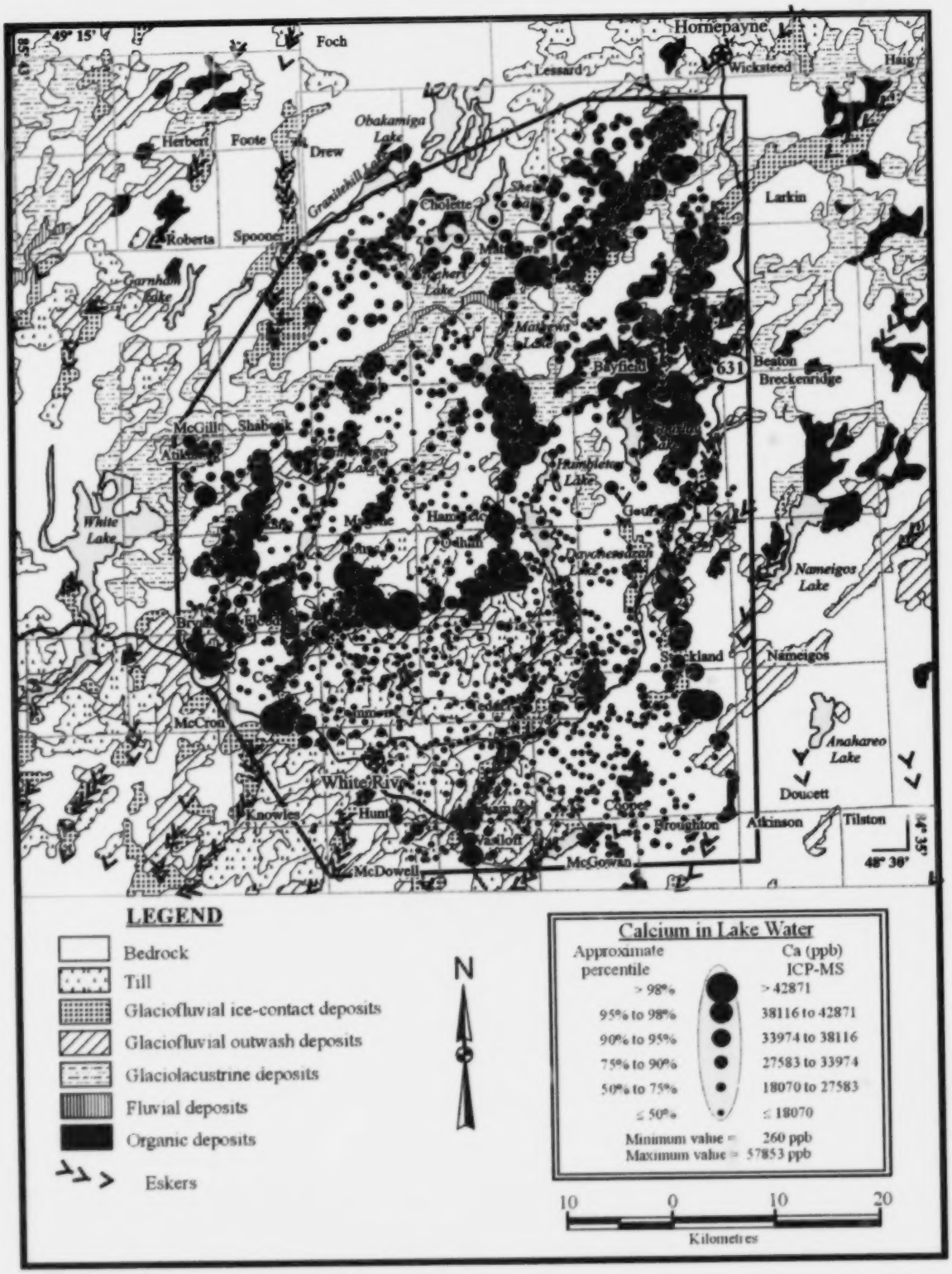
Proportional dot map of electrical conductivity of lake waters



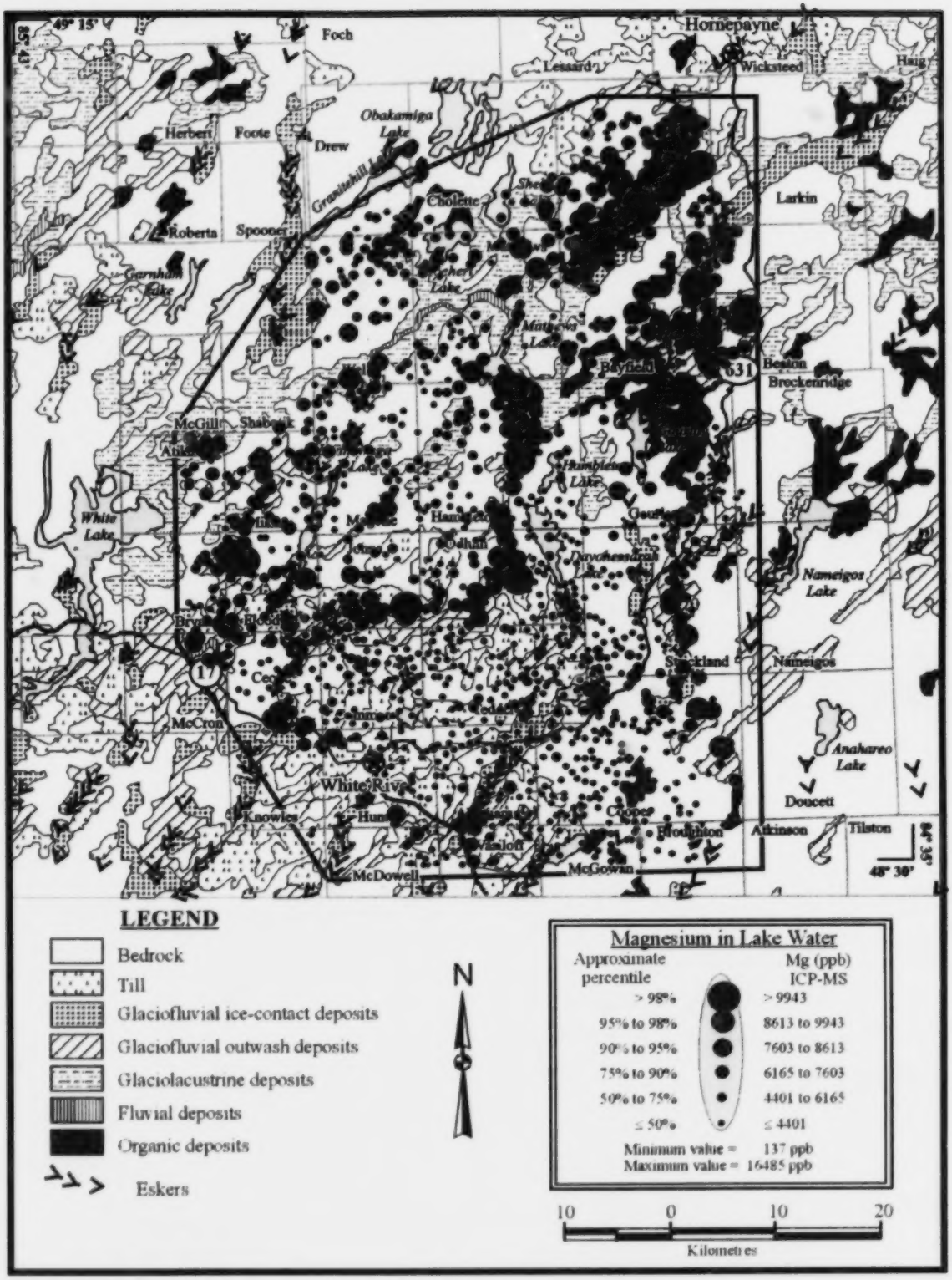
Proportional dot map of lake depth



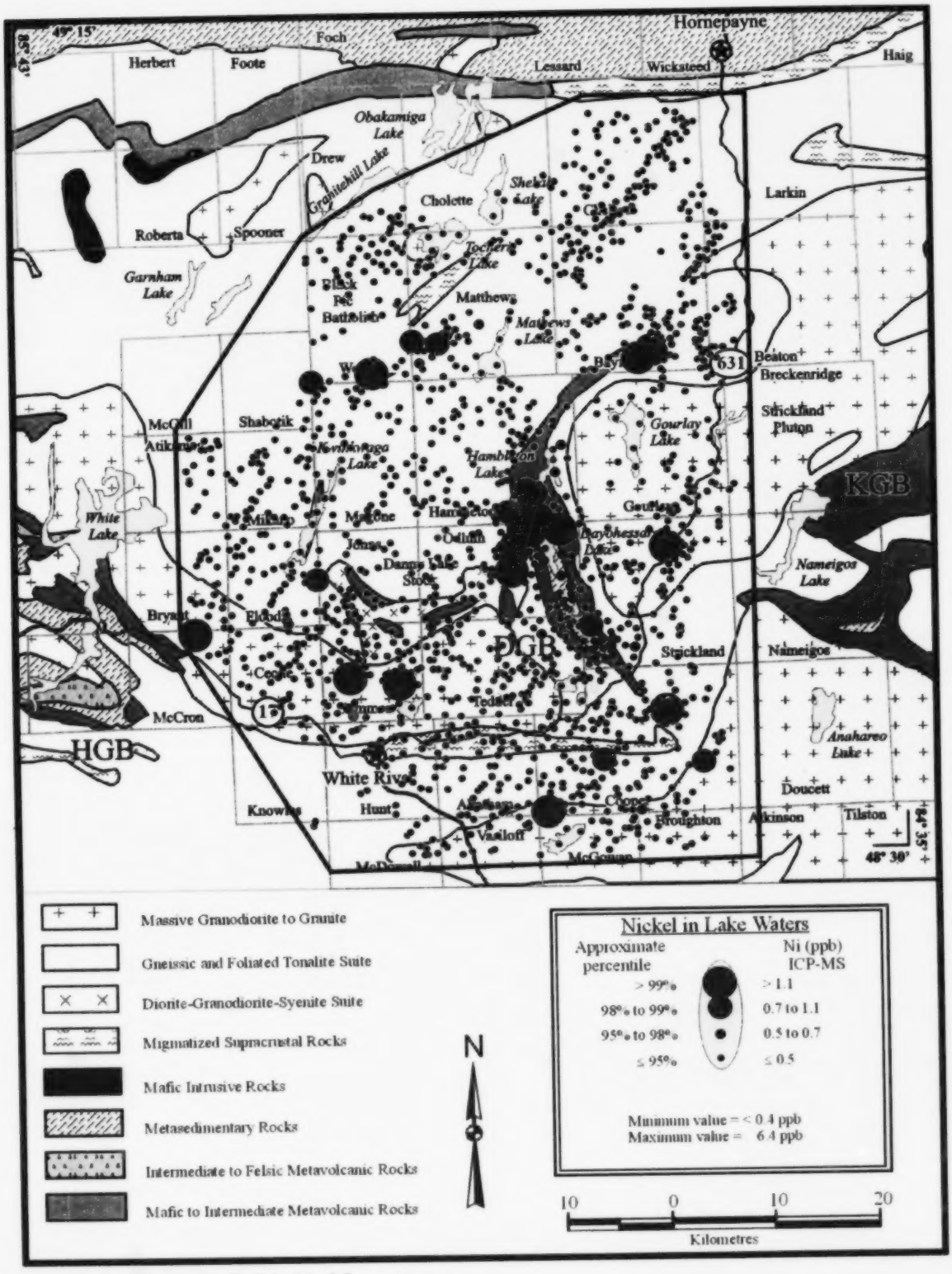
Proportional dot map of aluminum in lake waters



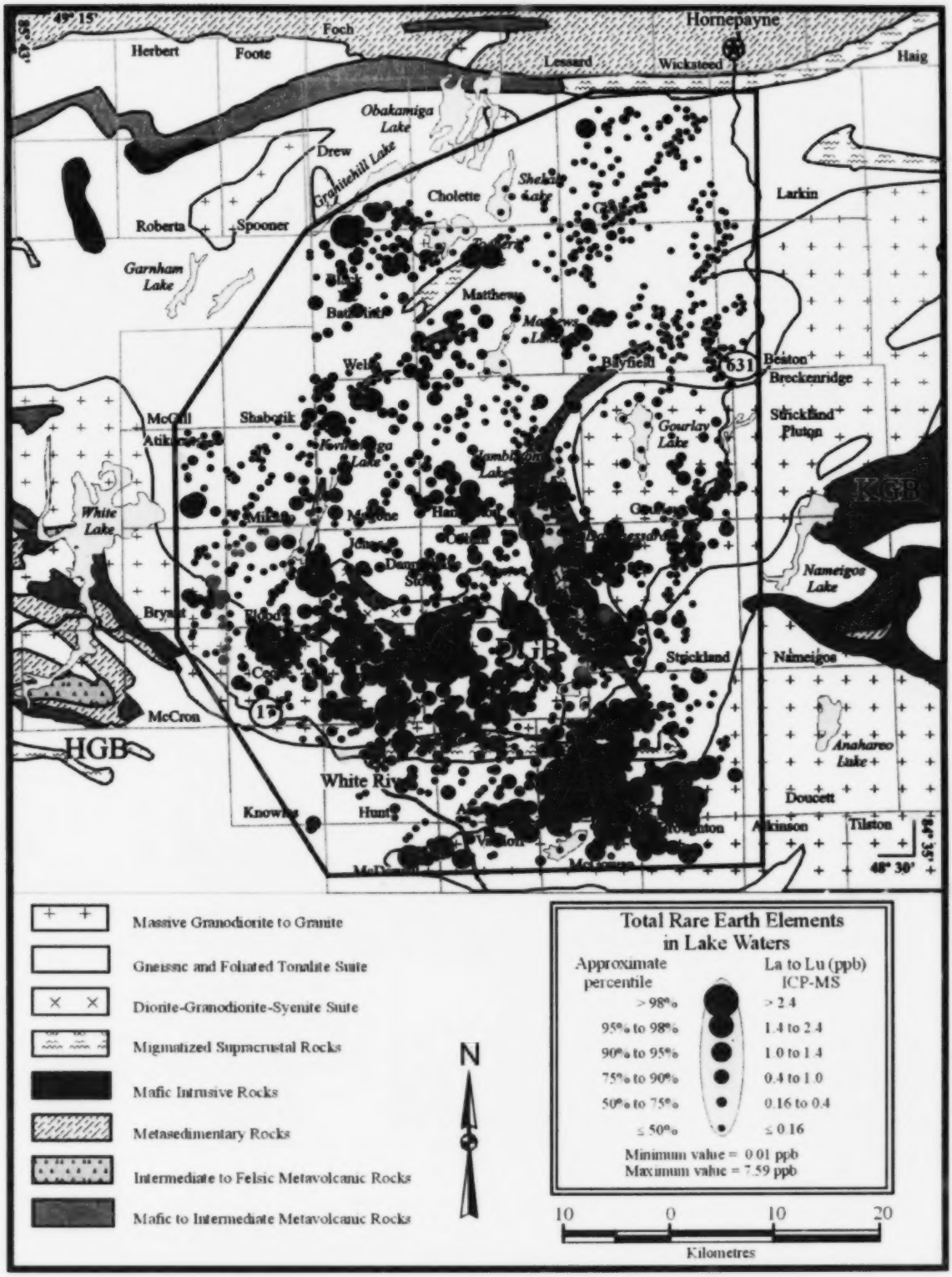
Proportional dot map of calcium in lake waters



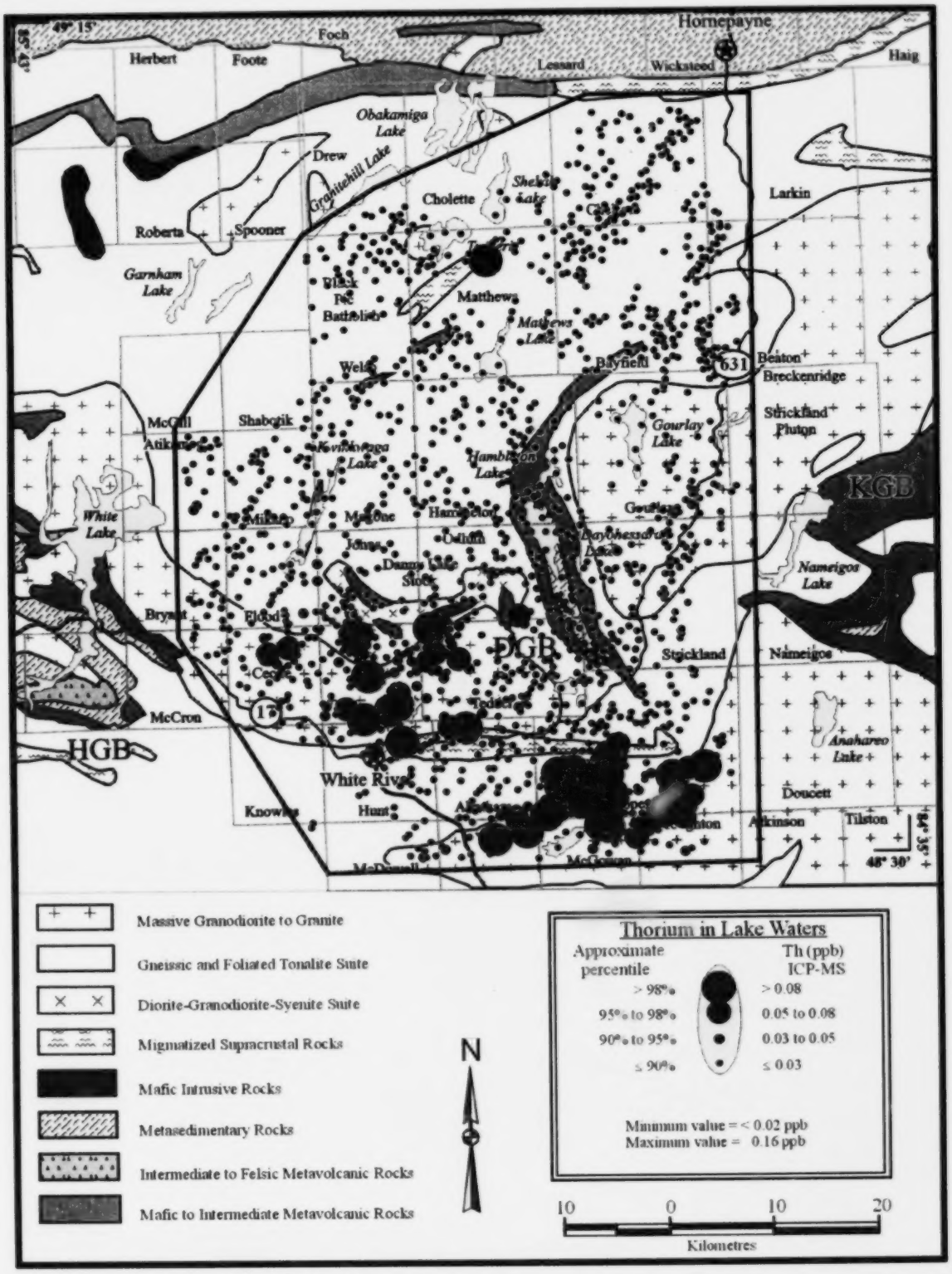
Proportional dot map of magnesium in lake waters



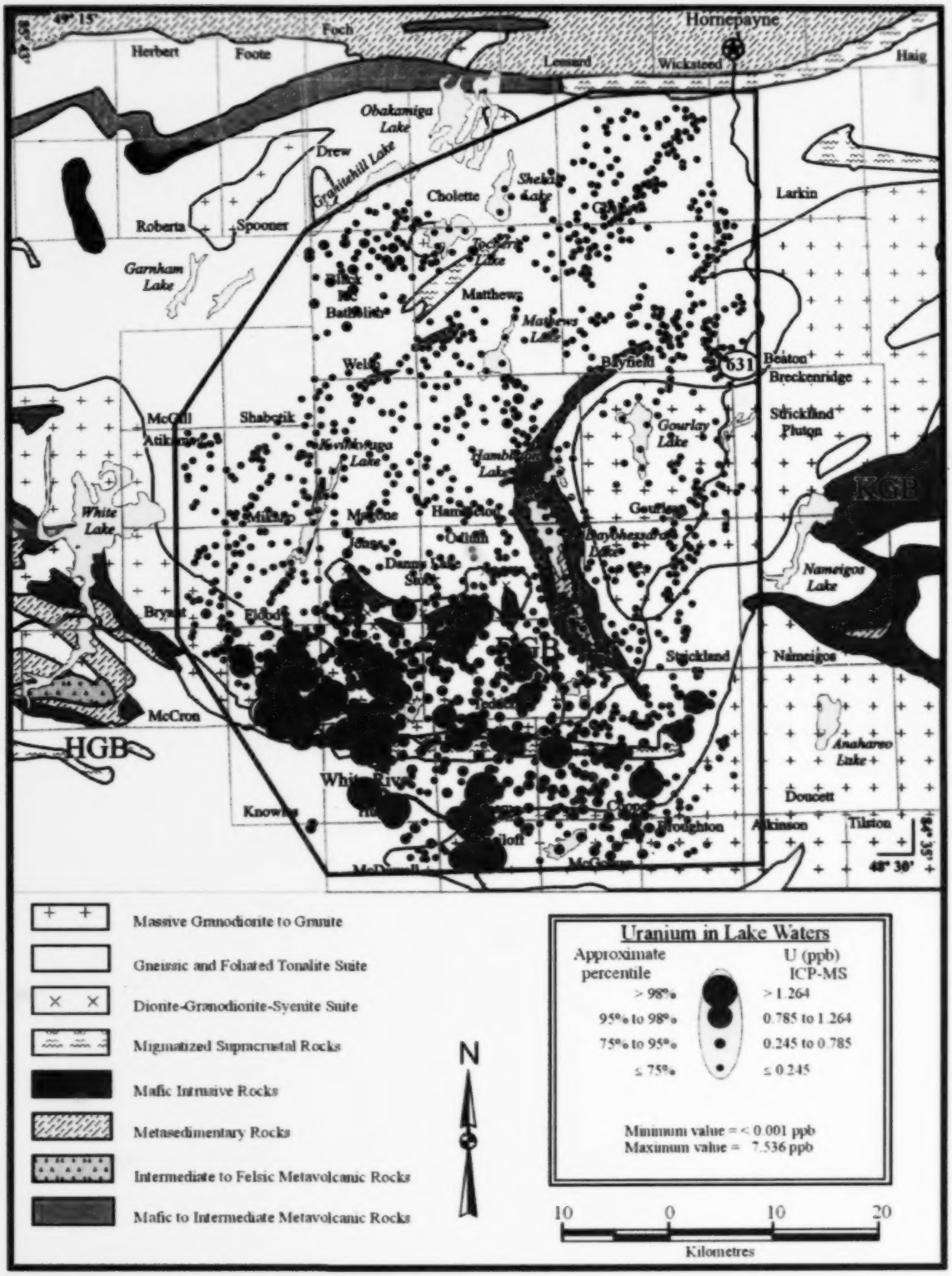
Proportional dot map of nickel in lake waters



Proportional dot map of total rare earth elements in lake waters



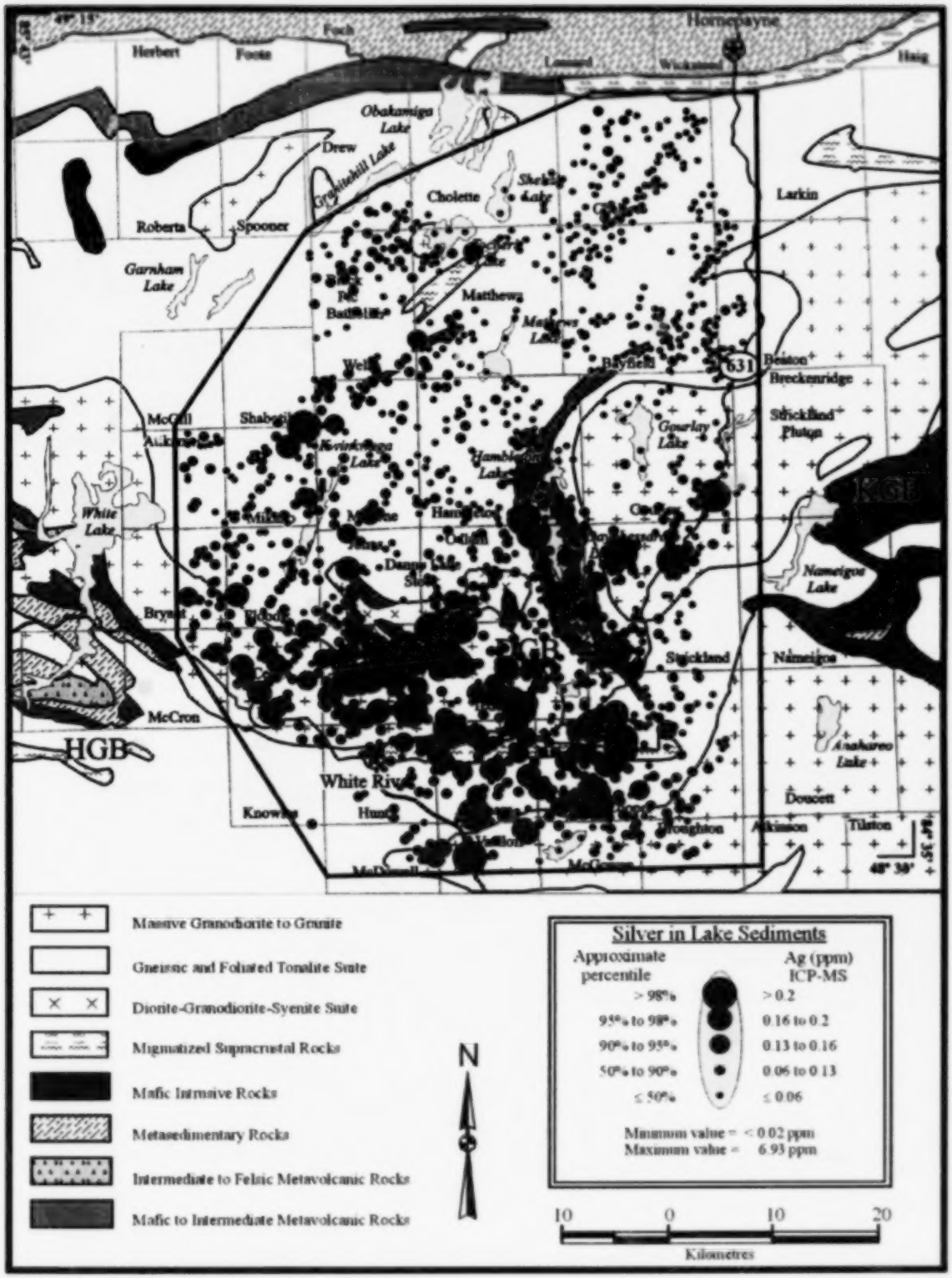
Proportional dot map of thorium in lake waters



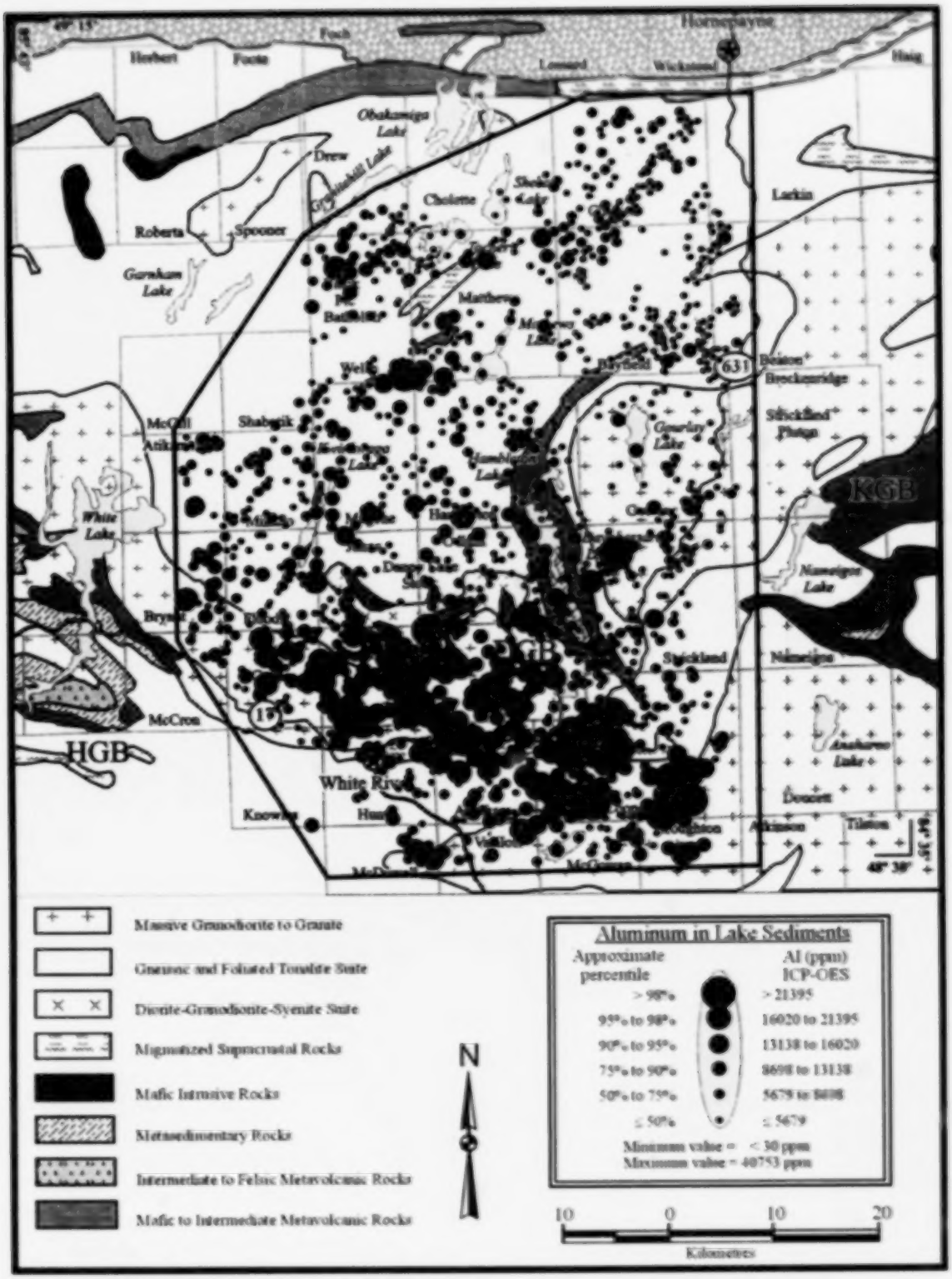
Proportional dot map of uranium in lake waters

APPENDIX B

Proportional dot maps of Ag, Al, As, Au (INAA), Au (FA), Ba, Be, Ca, Cd, Co, Cr, Cs, Cu, Fe, K, Li, LOI, Mg, Mn, Mo, Na, Nb, Ni, P, Pb, Pd, Pt, Rb, REE, Sb, Sc, Sr, Ta, Th, Ti, U, V, W and Zn in lake sediments



Proportional dot map of silver in lake sediments



Massive Granodiorite to Granite

Gneissic and Foliated Tonalite Suite

Diorite-Granodiorite-Syenite Suite

Migmatized Supracrustal Rocks

Mafic Intrusive Rocks

Metasedimentary Rocks

Intermediate to Felsic Metavolcanic Rocks

Mafic to Intermediate Metavolcanic Rocks

N

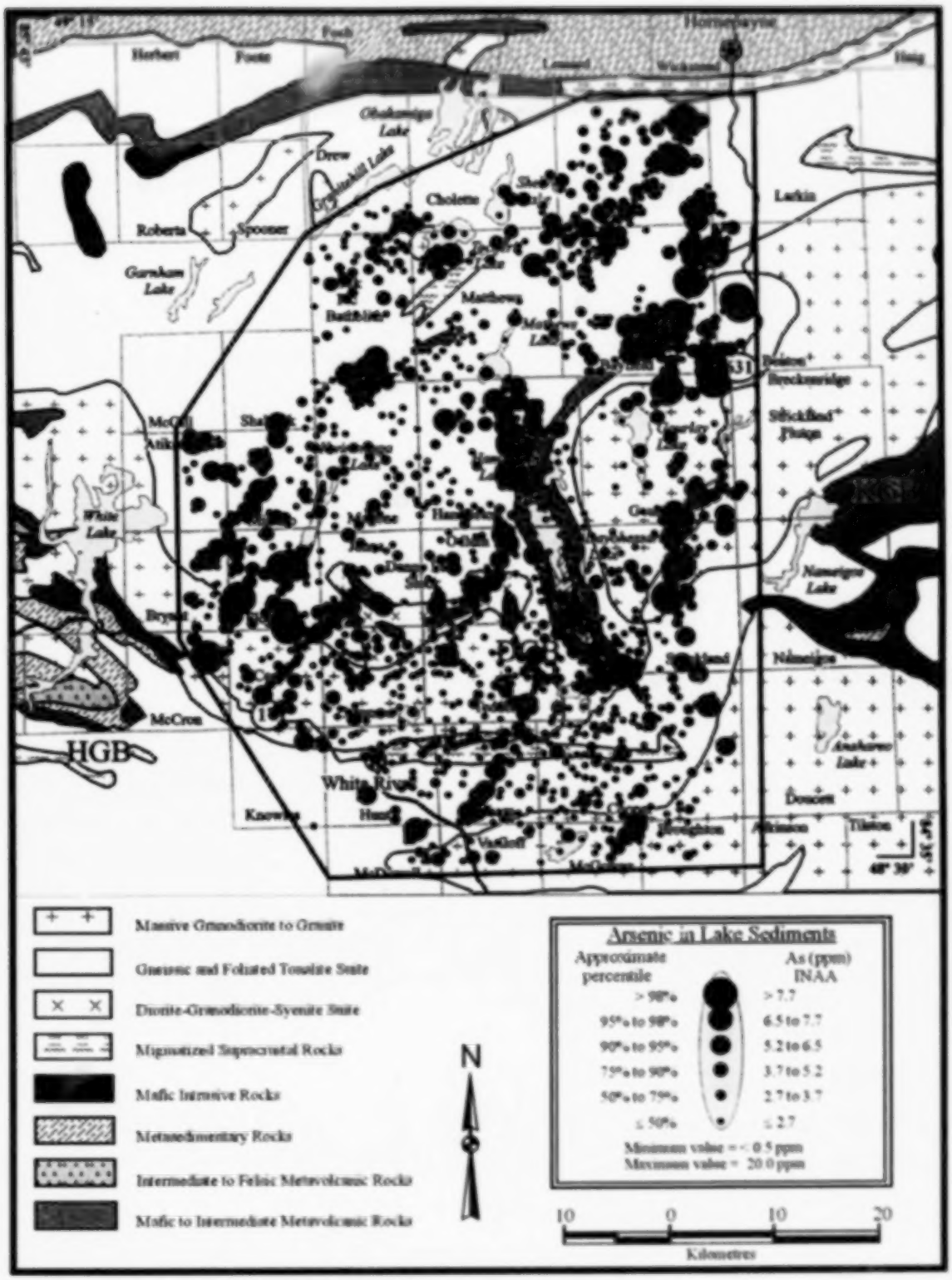
Aluminum in Lake Sediments

Approximate percentile	Al (ppm) ICP-OES
> 98%	> 21395
95% to 98%	16020 to 21395
90% to 95%	13138 to 16020
75% to 90%	8698 to 13138
50% to 75%	5679 to 8698
≤ 50%	≤ 5679

Minimum value = < 30 ppm
Maximum value = 40753 ppm

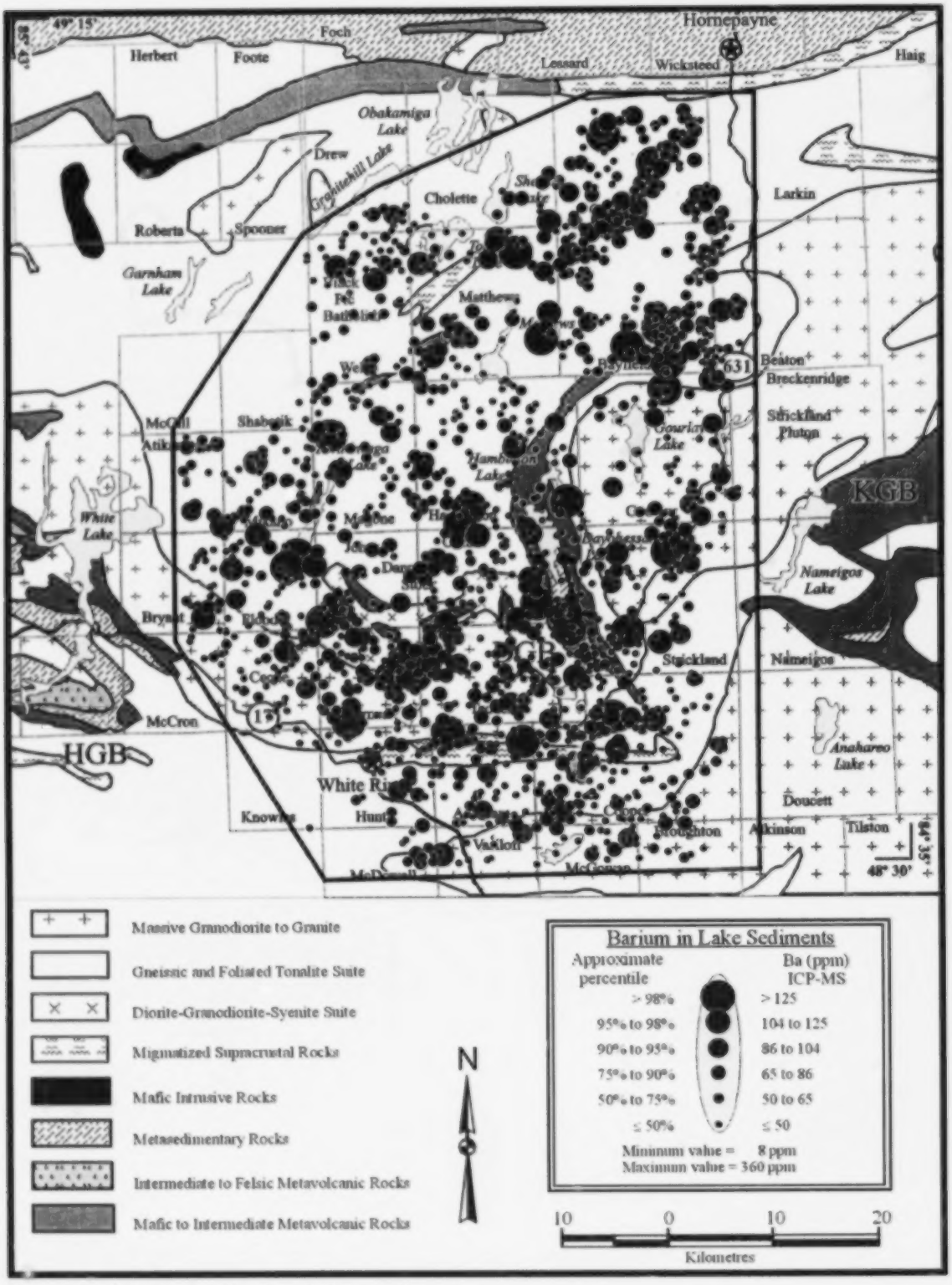
10 0 10 20
Kilometres

Proportional dot map of aluminum in lake sediments

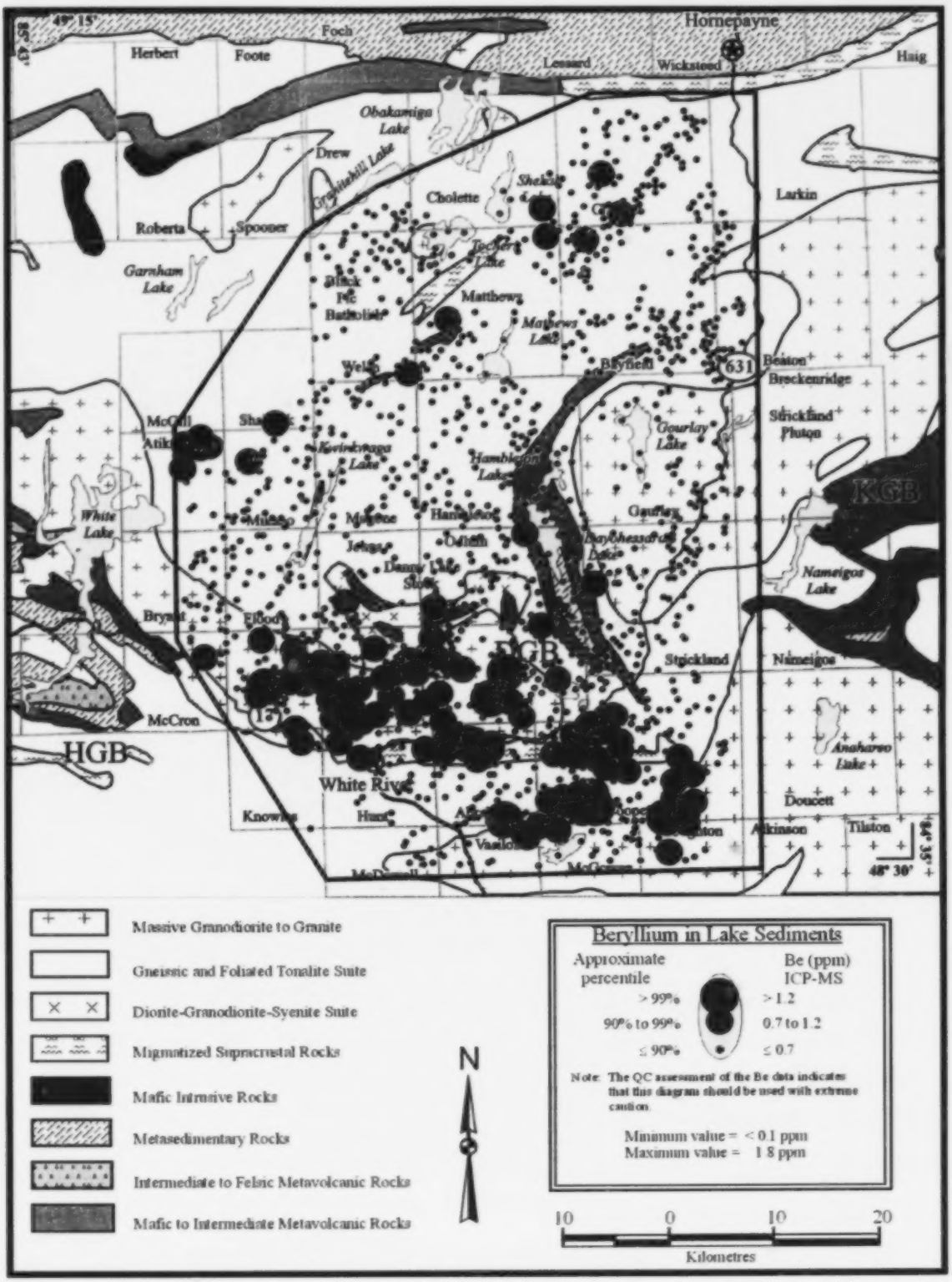

Herbert
Foote
Lomond
Wickwire
Haig
Chukuminga Lake
Drew
Cholette
Roberts
Spooner
Garnham Lake
Matheson
Lakin
Brocksmith
Stickland Pluton
White Lake
Nimaniqui Lake
Nilauzigan
McCron
HGB
White River
Dougan
Massie
Hislop
Massie Group
Massie Group
Massie Group

Proportional dot map of gold (INAA) in lake sediments

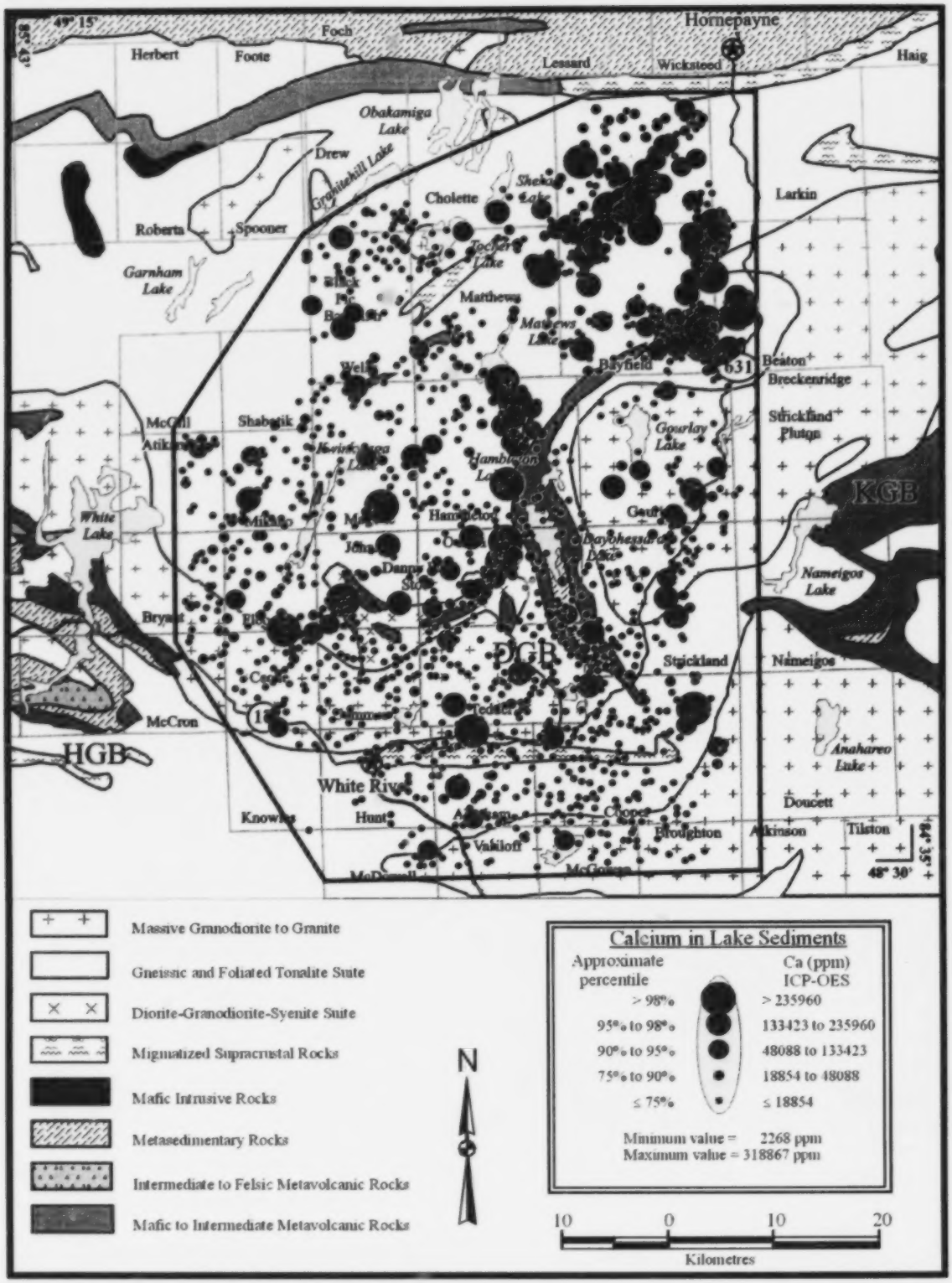
Proportional dot map of gold (fire assay) in lake sediments



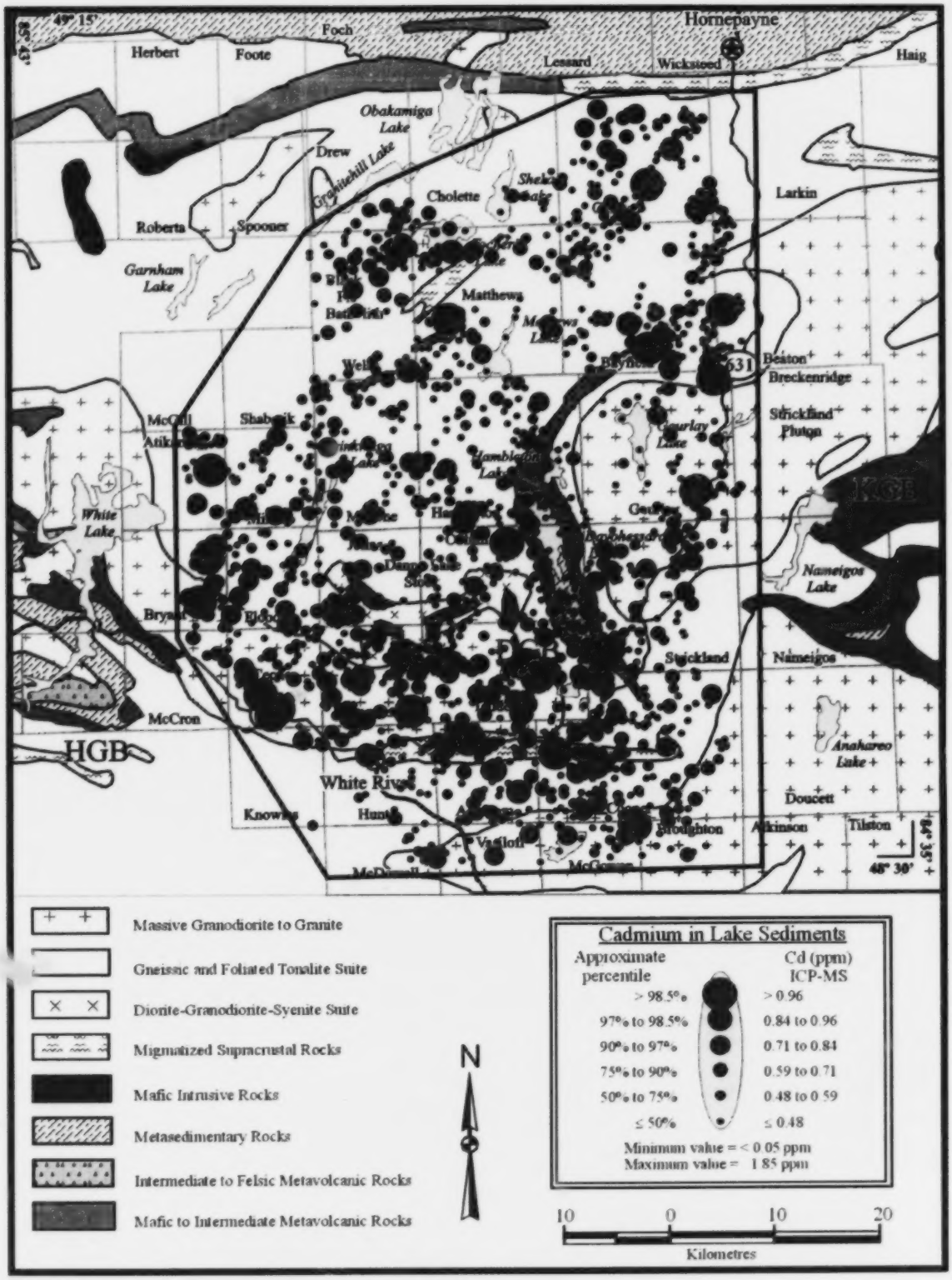
Proportional dot map of barium in lake sediments



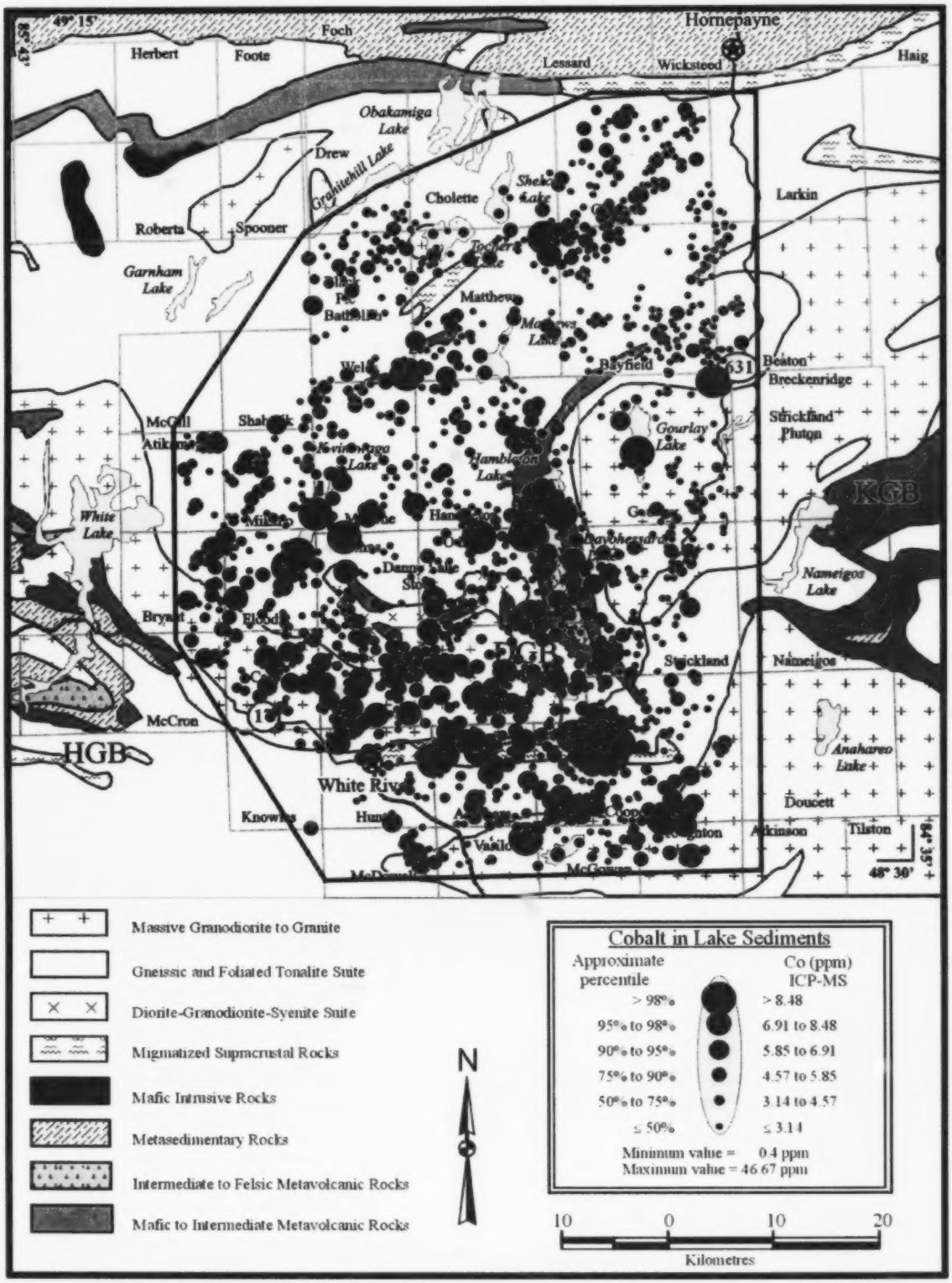
Proportional dot map of beryllium in lake sediments



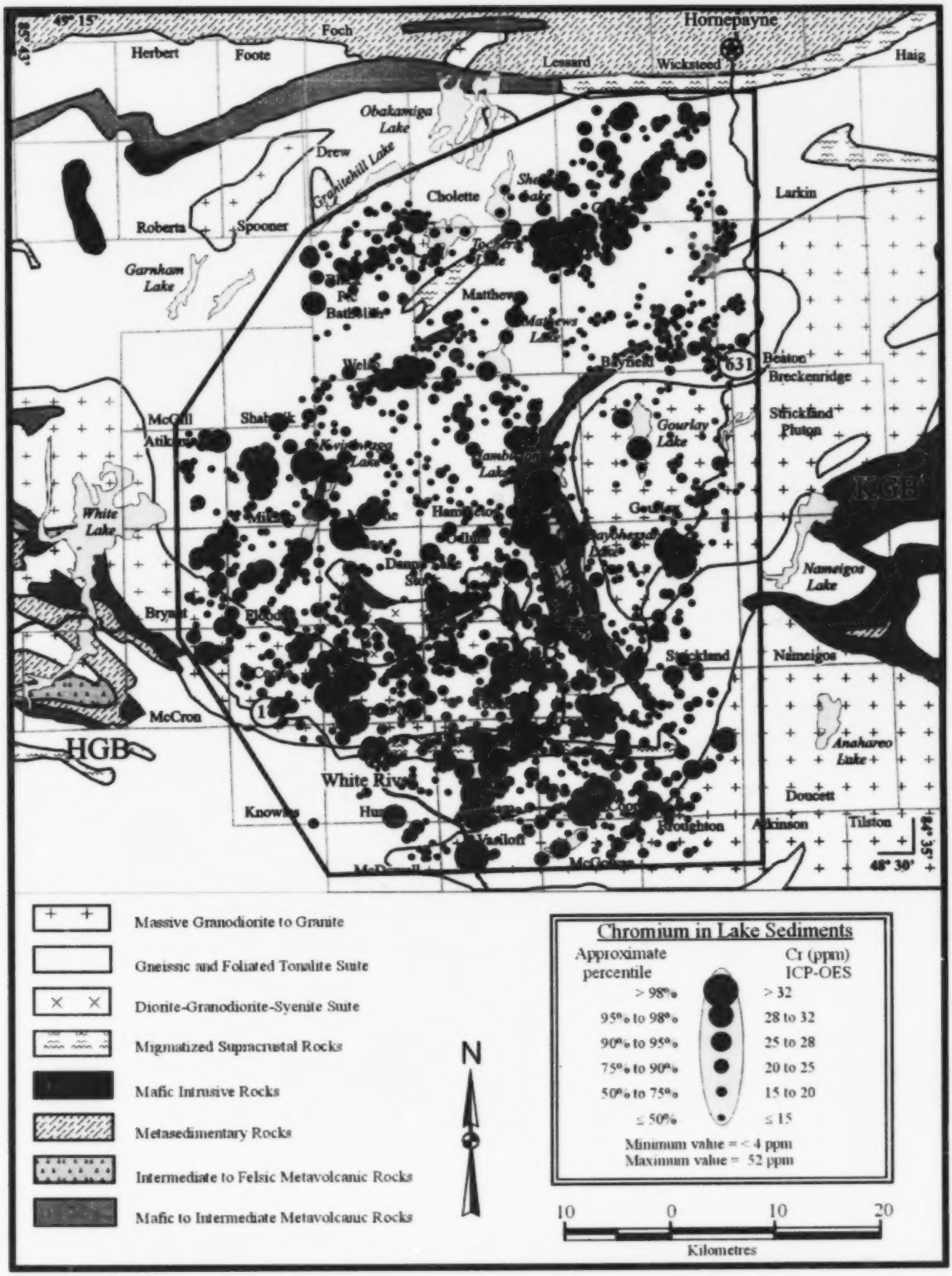
Proportional dot map of calcium in lake sediments



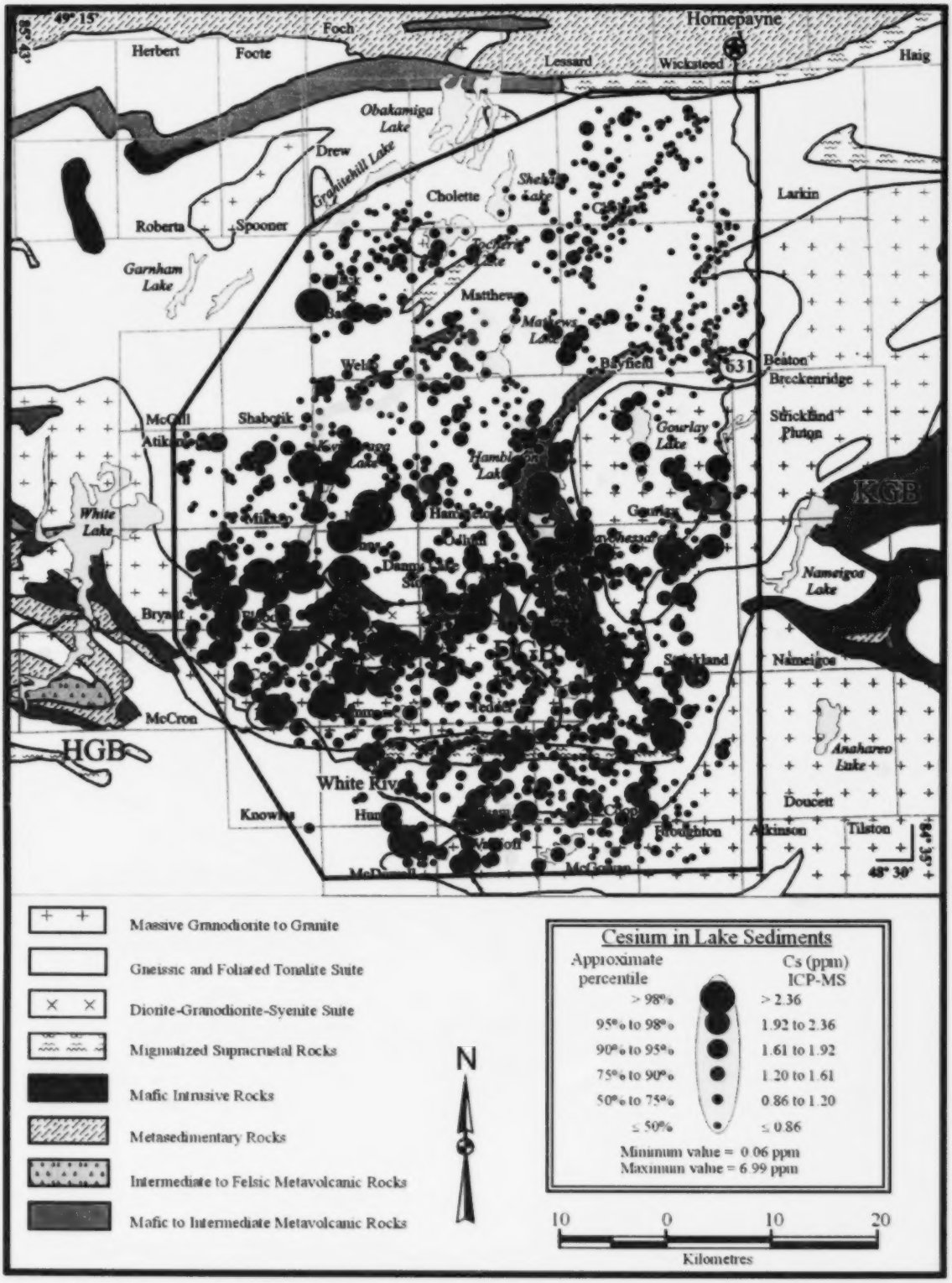
Proportional dot map of cadmium in lake sediments



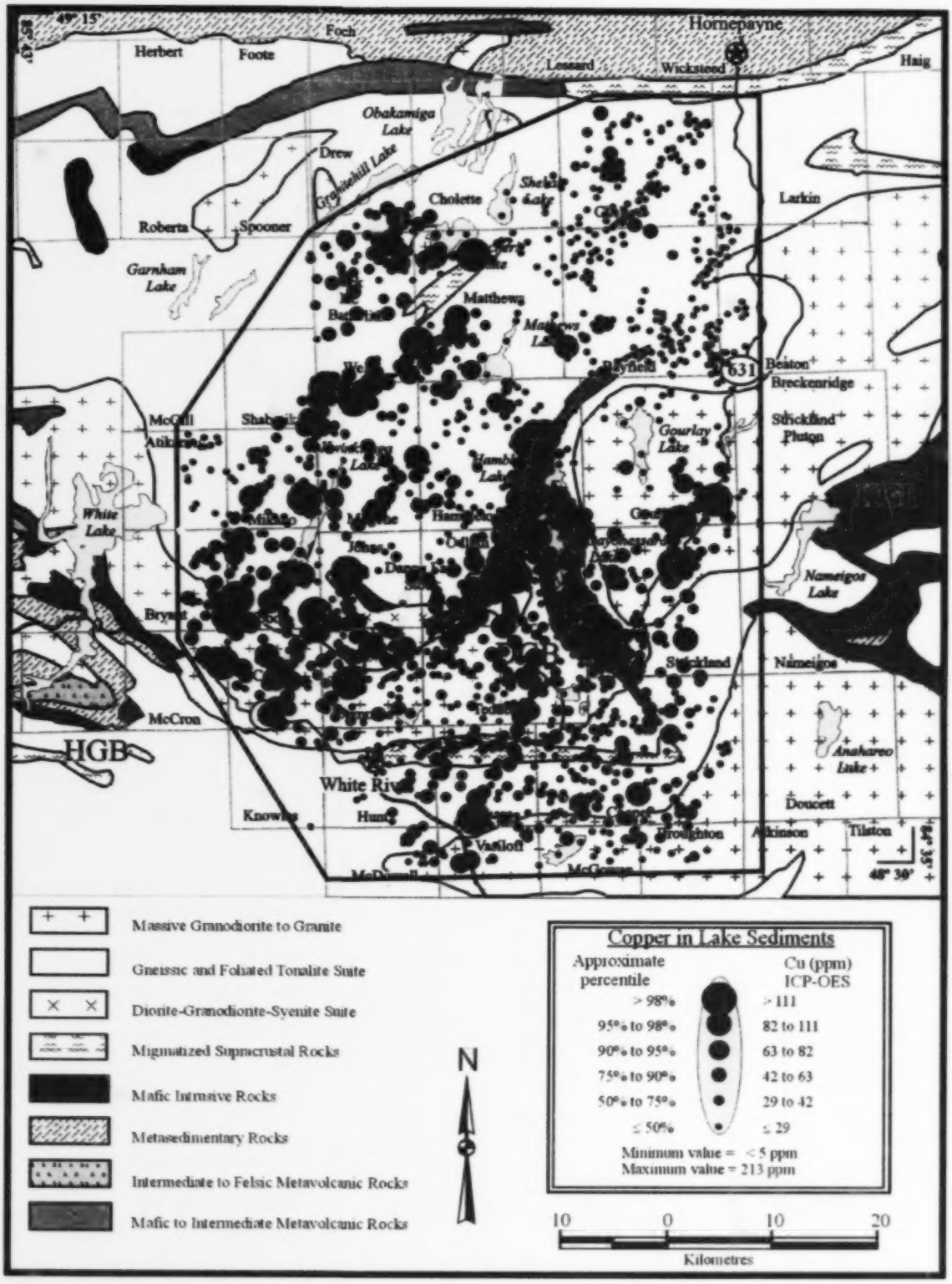
Proportional dot map of cobalt in lake sediments



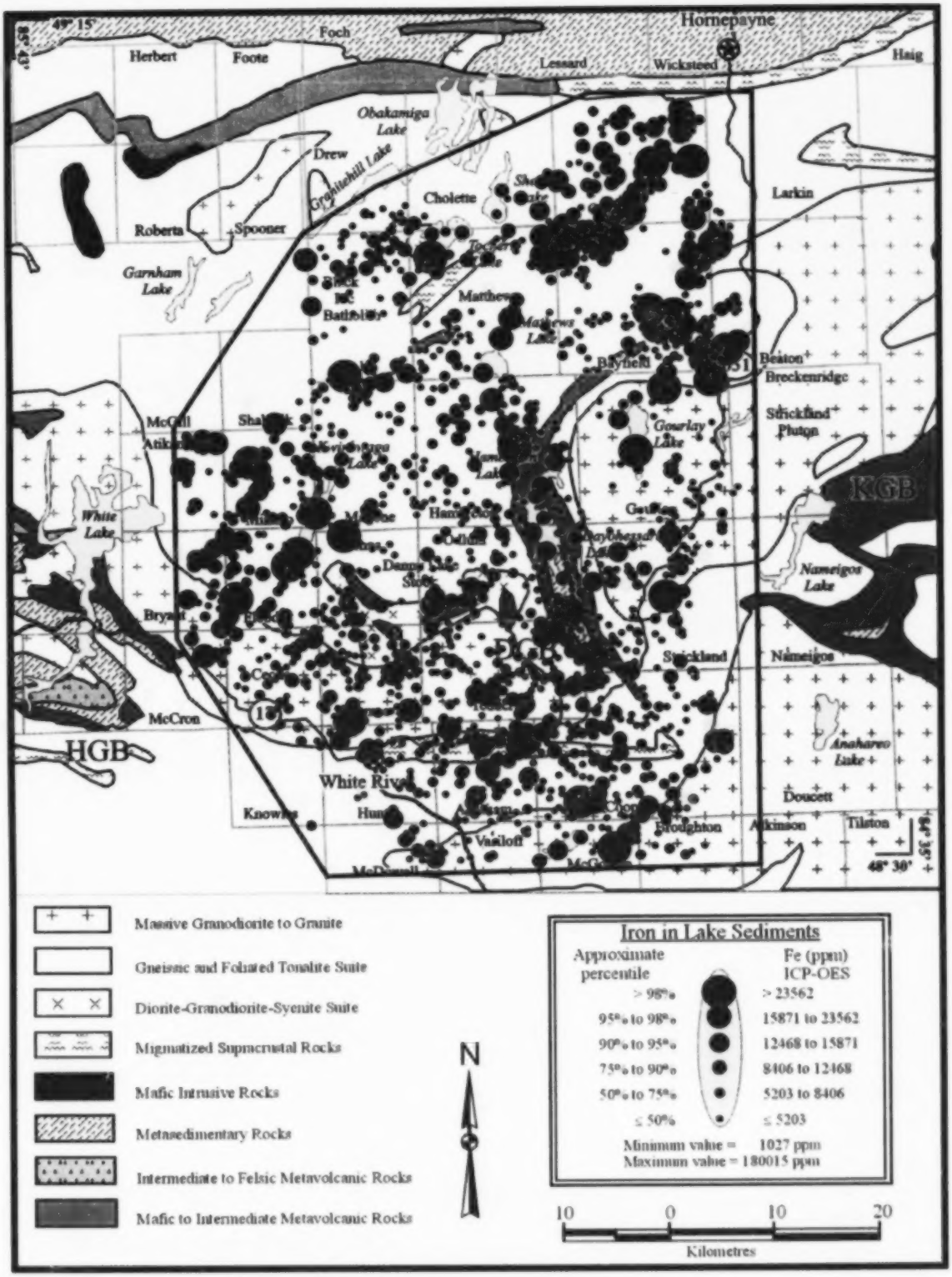
Proportional dot map of chromium in lake sediments



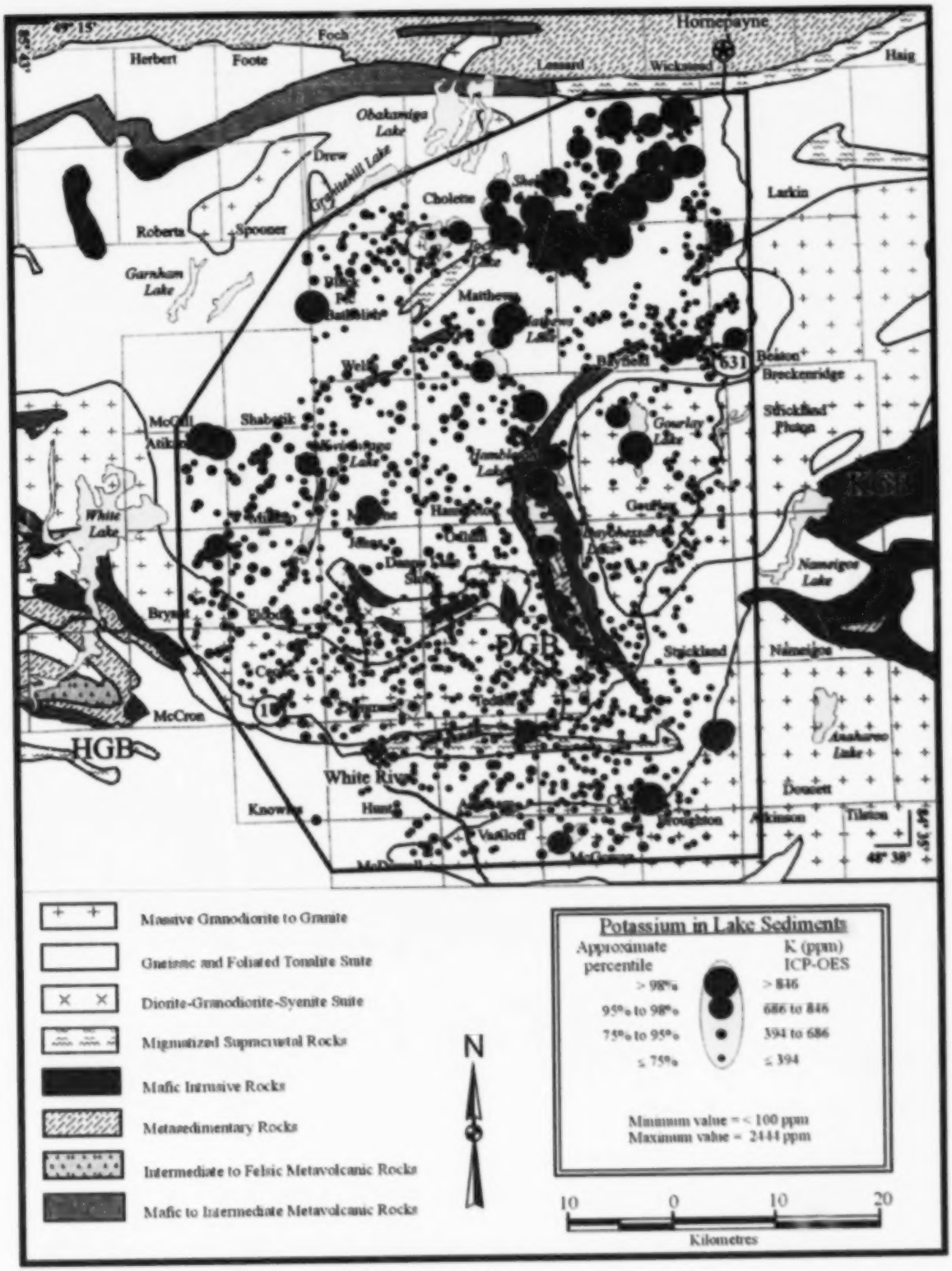
Proportional dot map of cesium in lake sediments



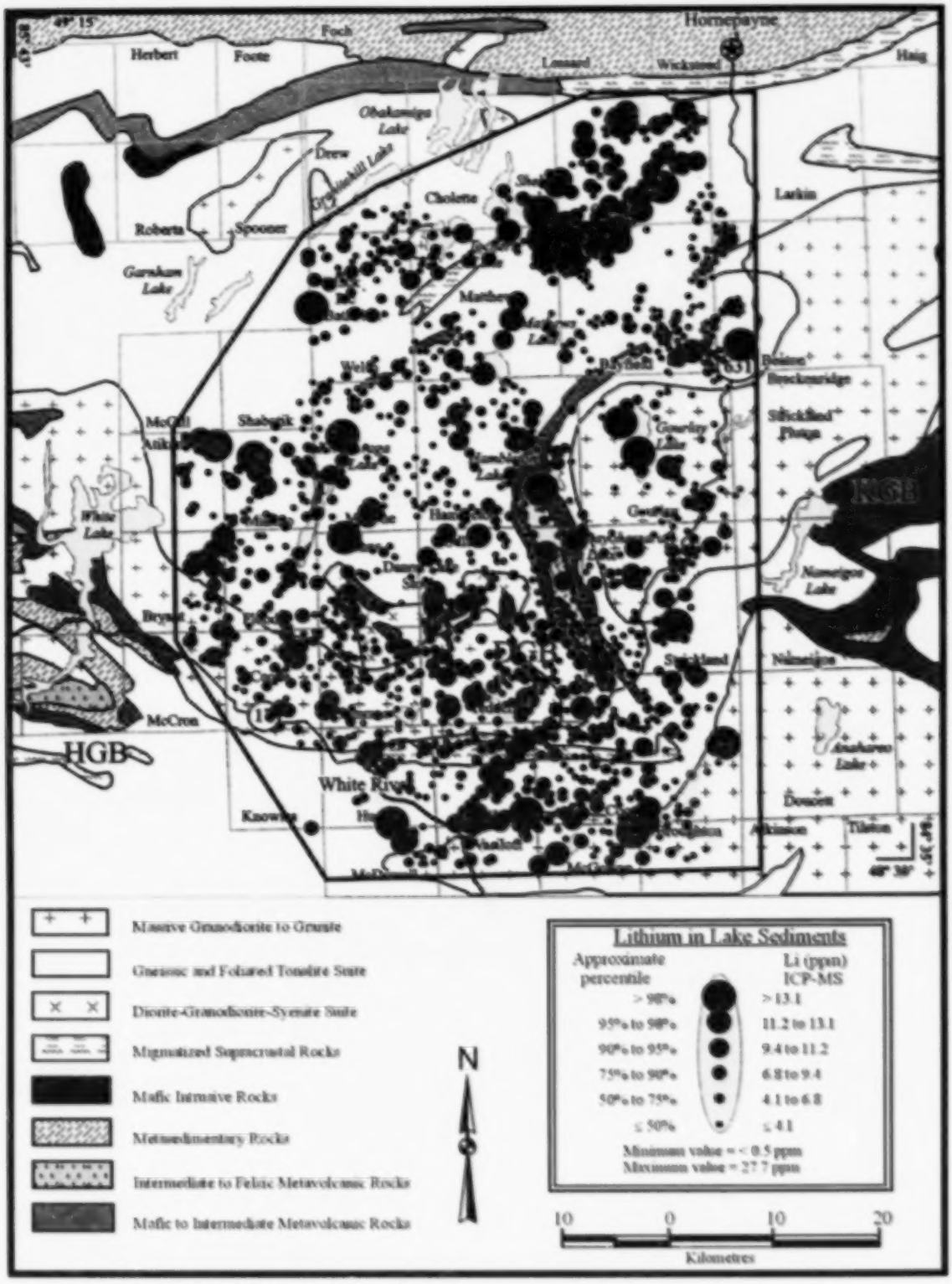
Proportional dot map of copper in lake sediments



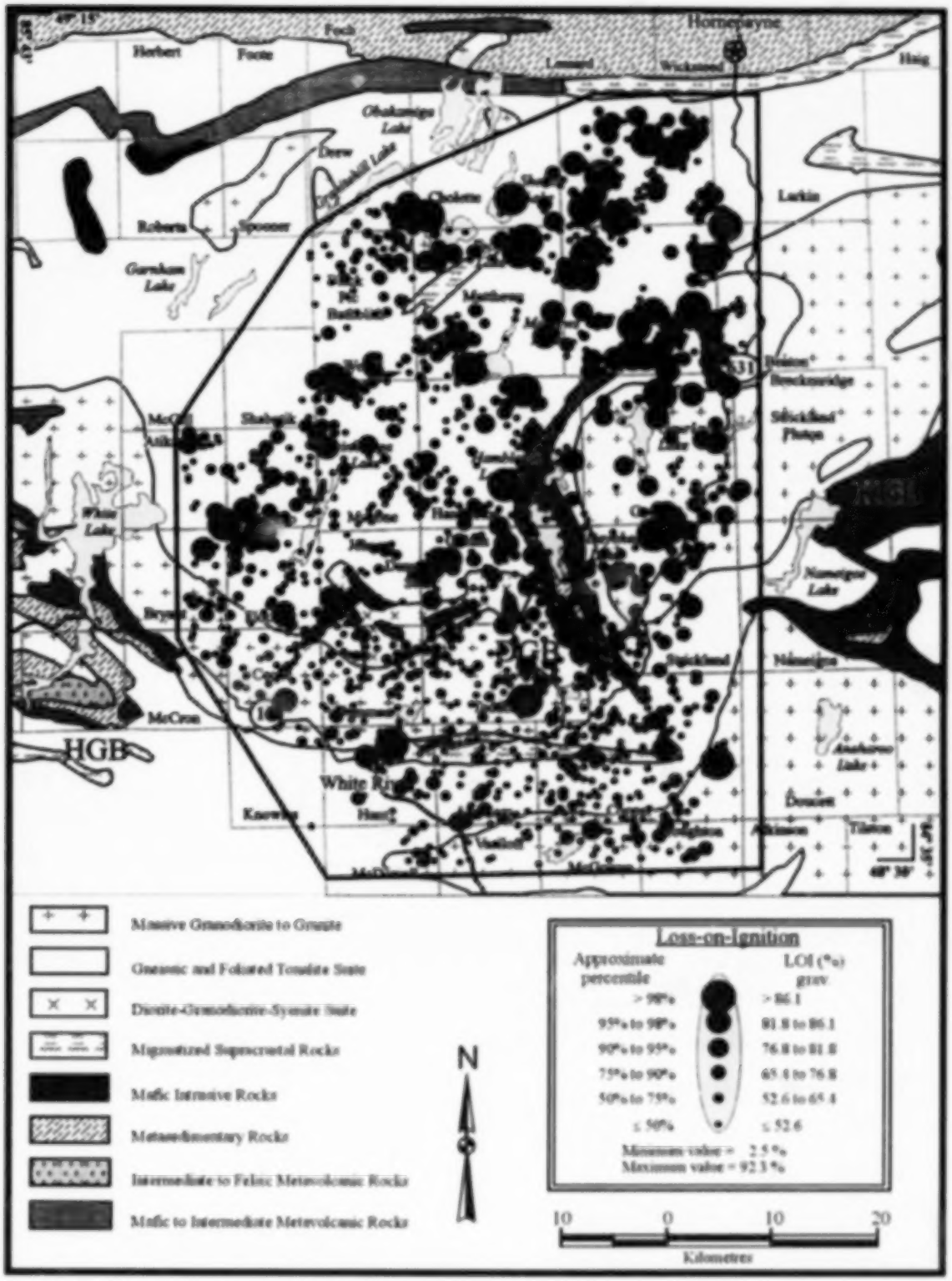
Proportional dot map of iron in lake sediments



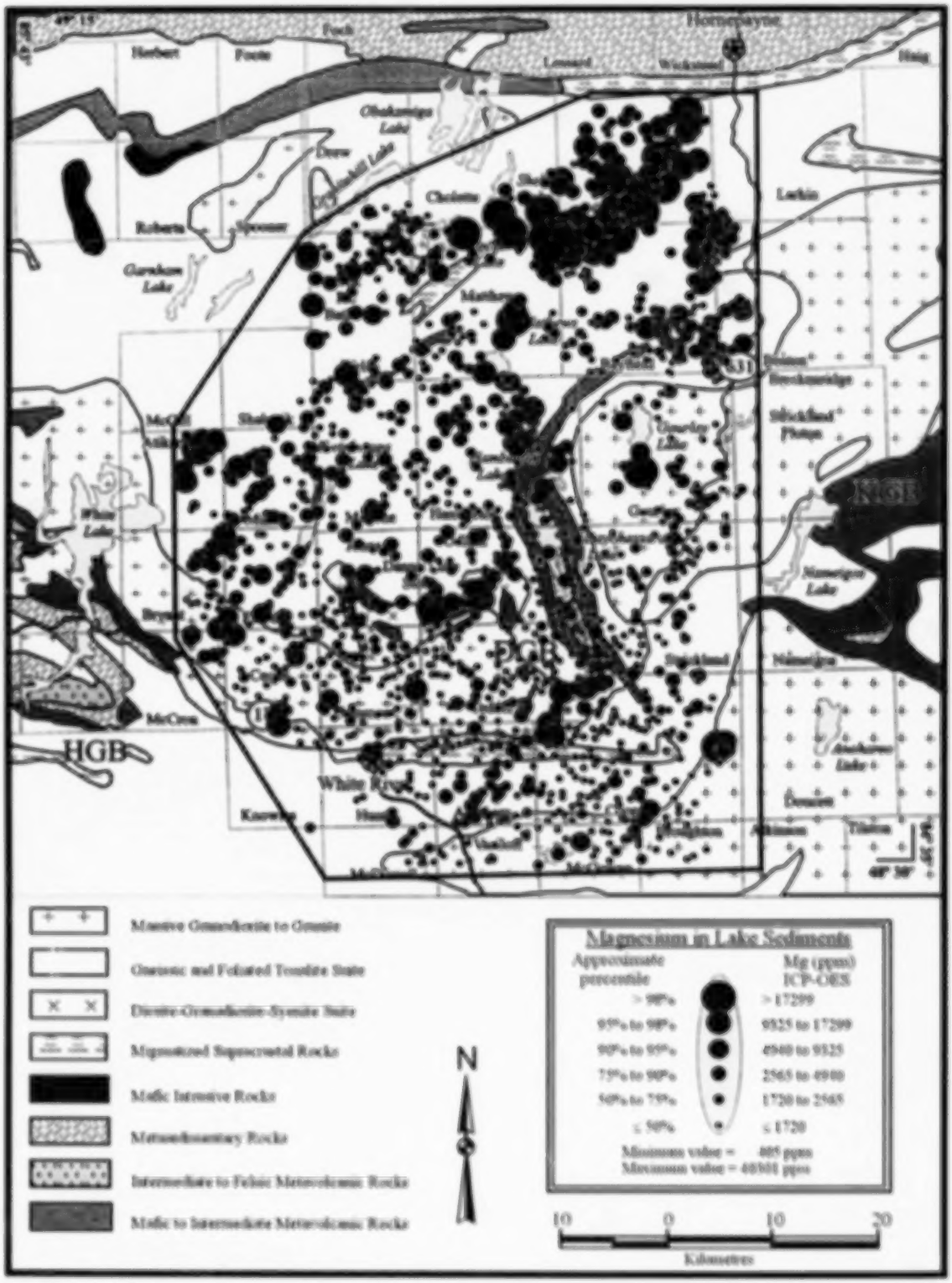
Proportional dot map of potassium in lake sediments



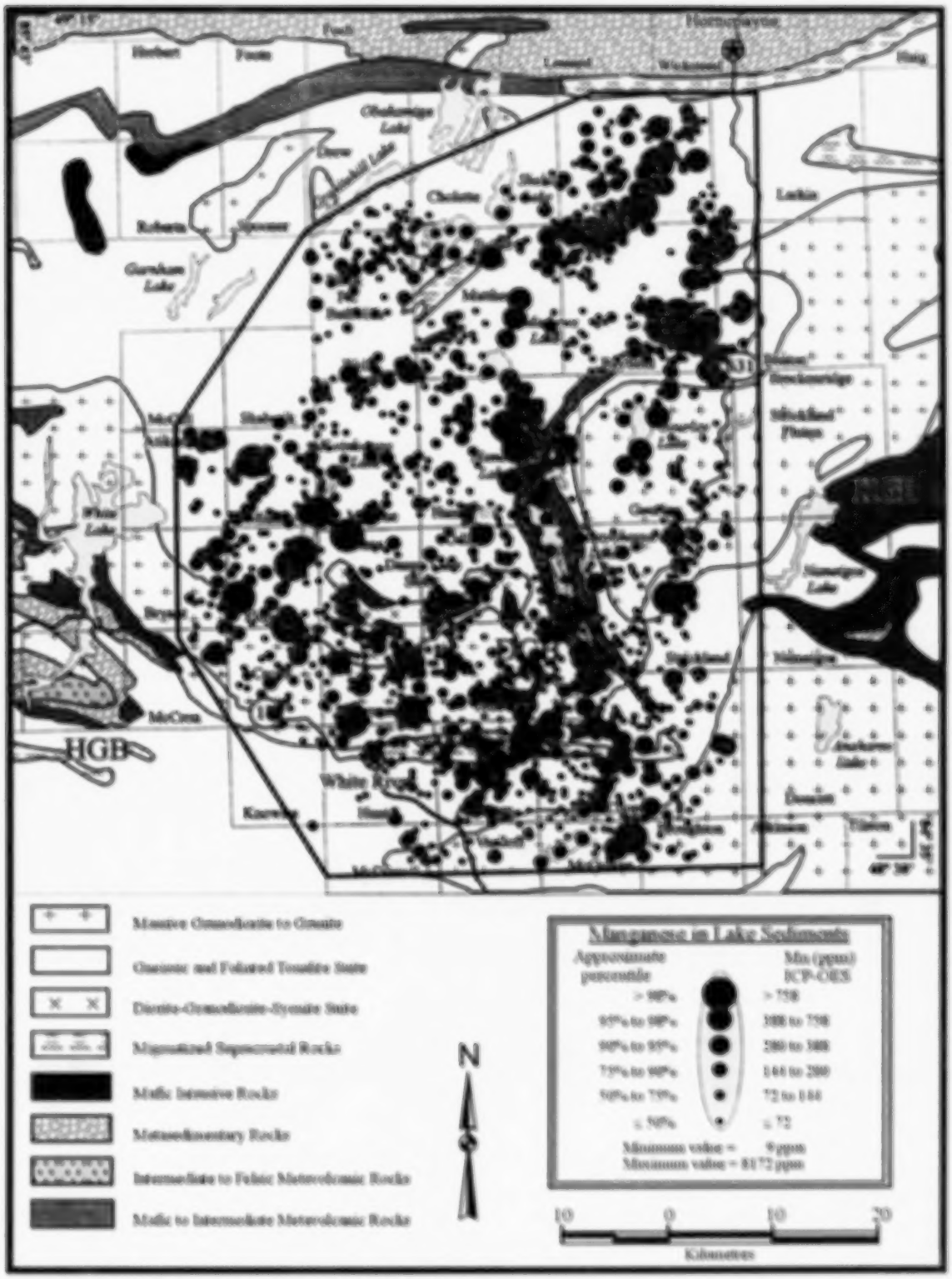
Proportional dot map of lithium in lake sediments



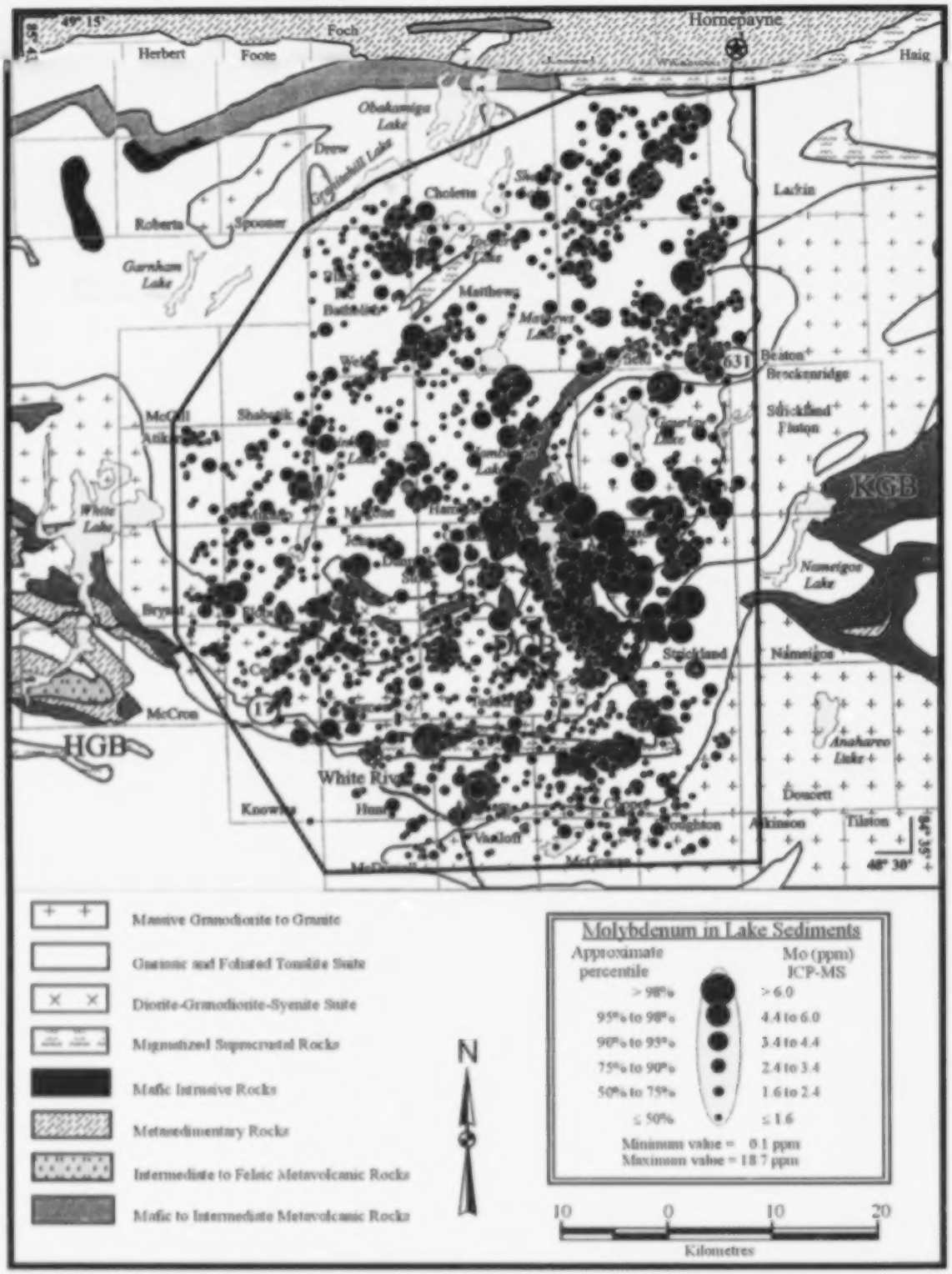
Proportional dot map of loss-on-ignition



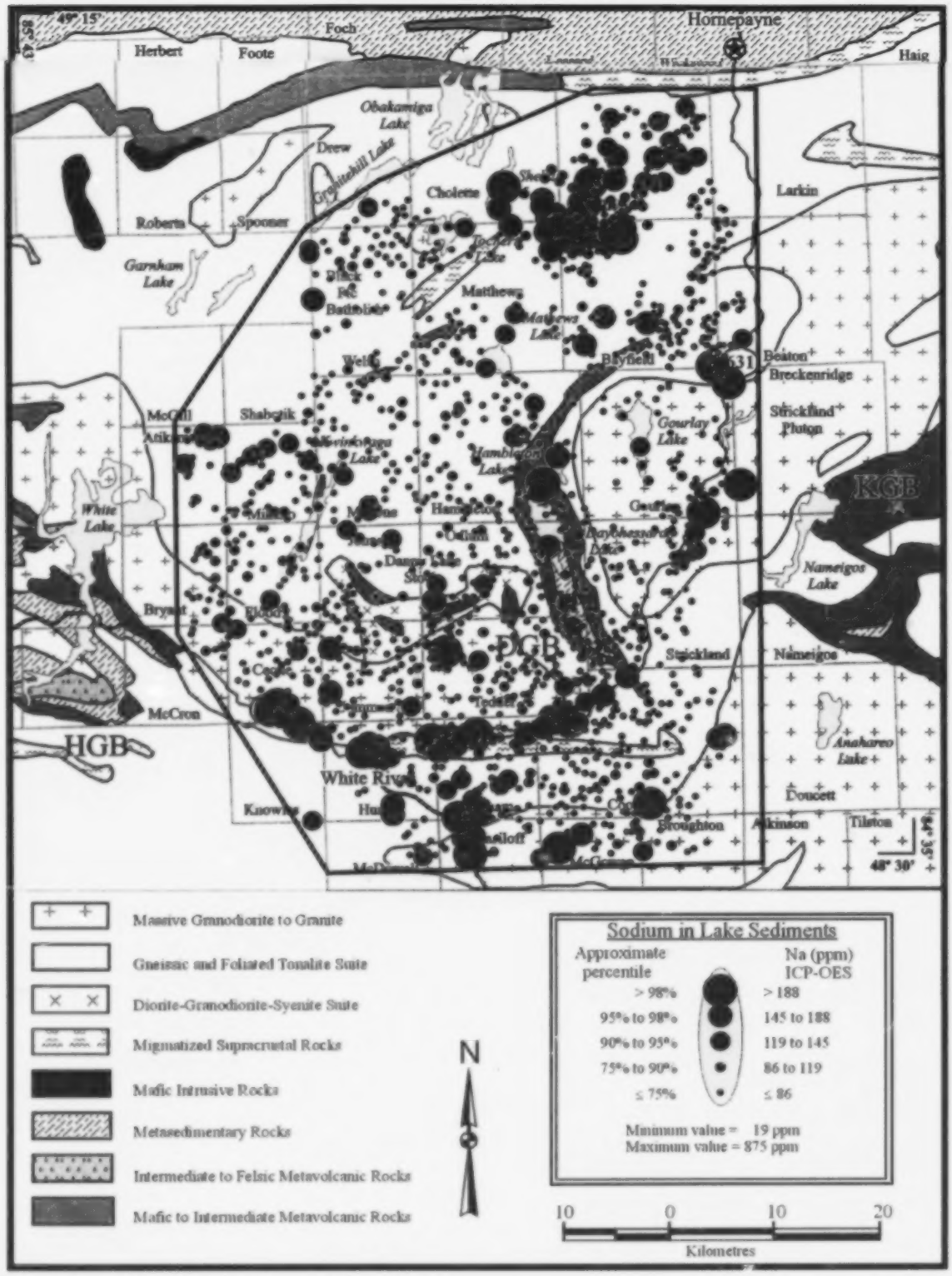
Proportional dot map of magnesium in lake sediments



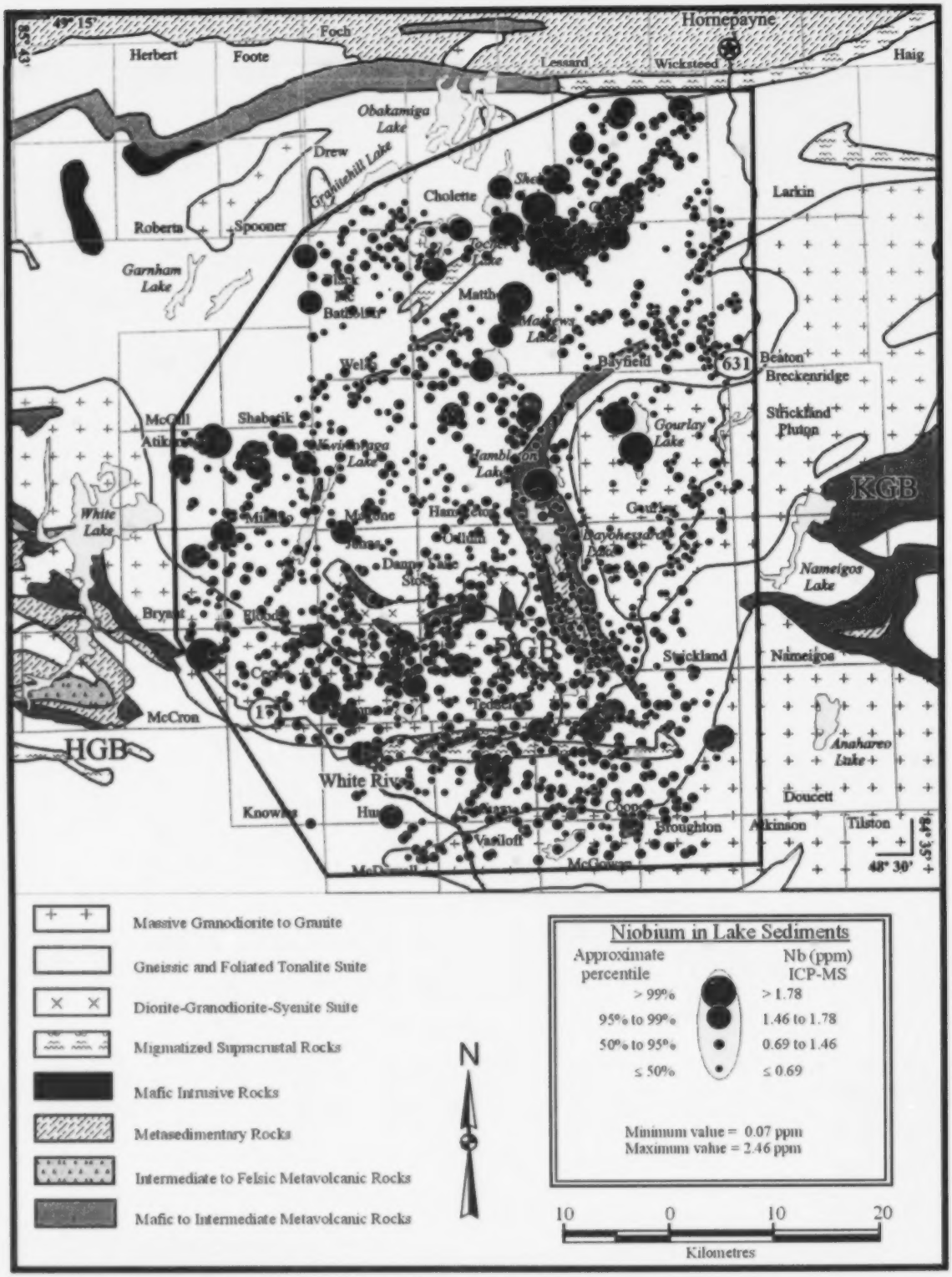
Proportional dot map of manganese in lake sediments



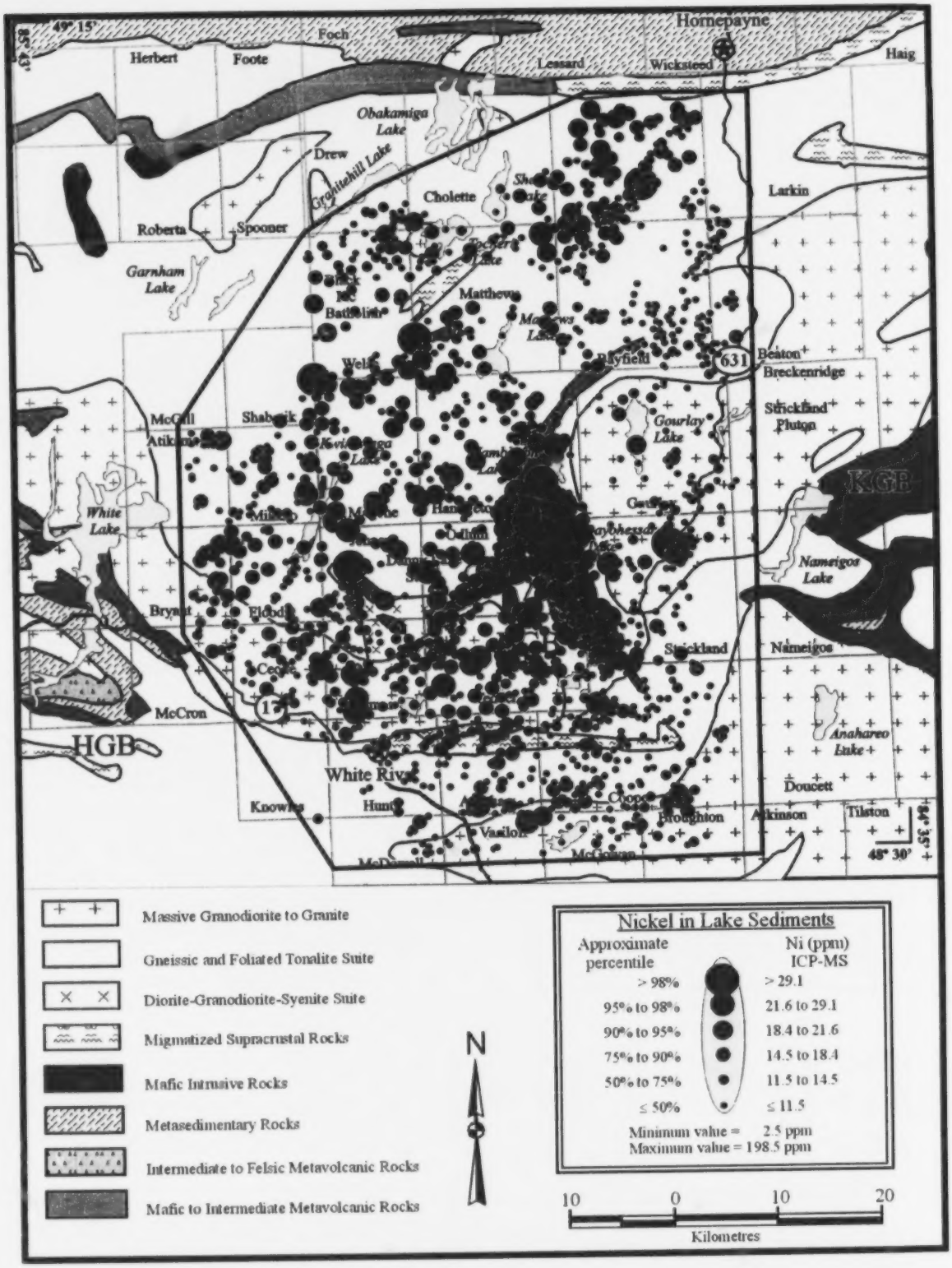
Proportional dot map of molybdenum in lake sediments



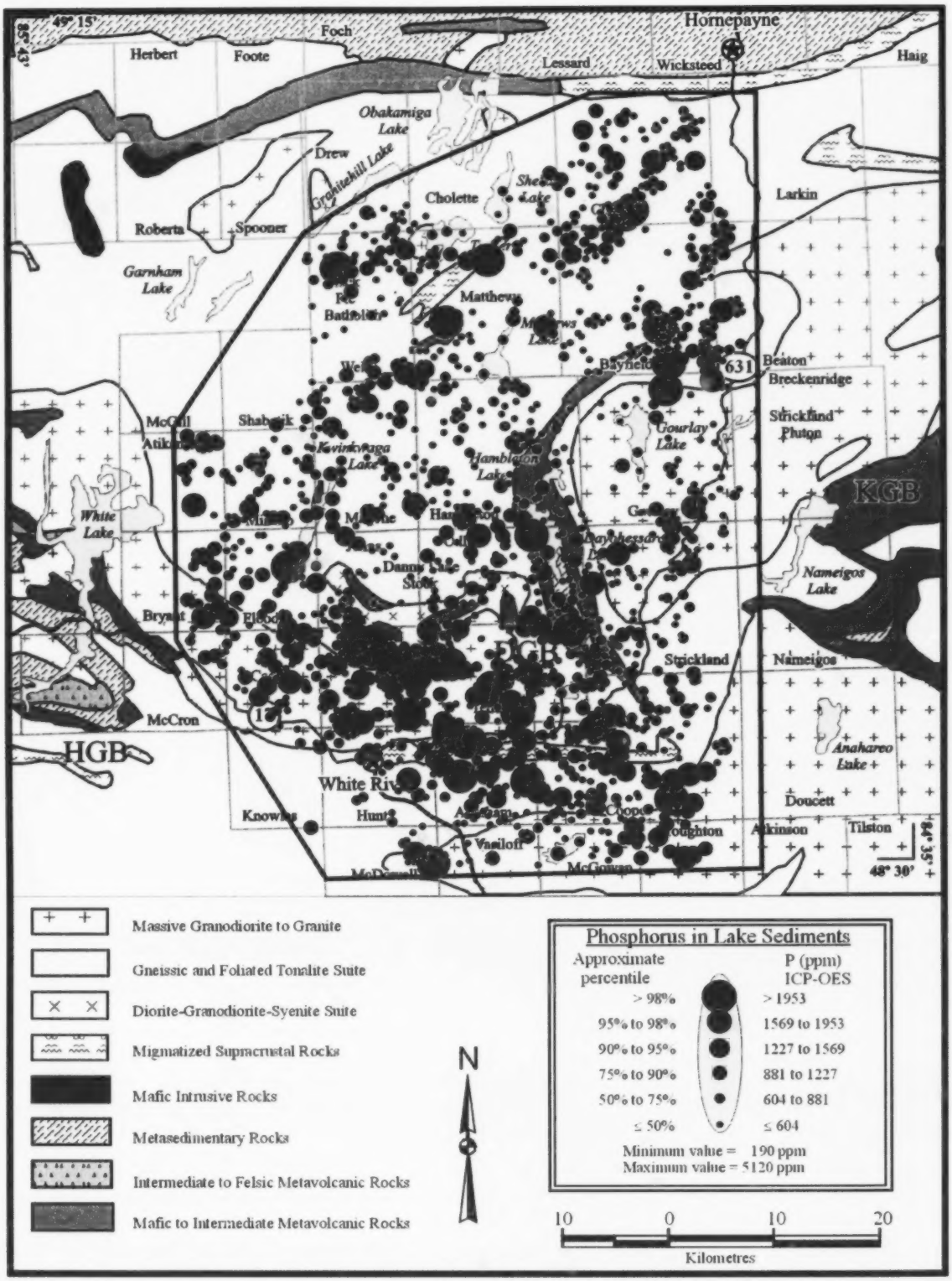
Proportional dot map of sodium in lake sediments



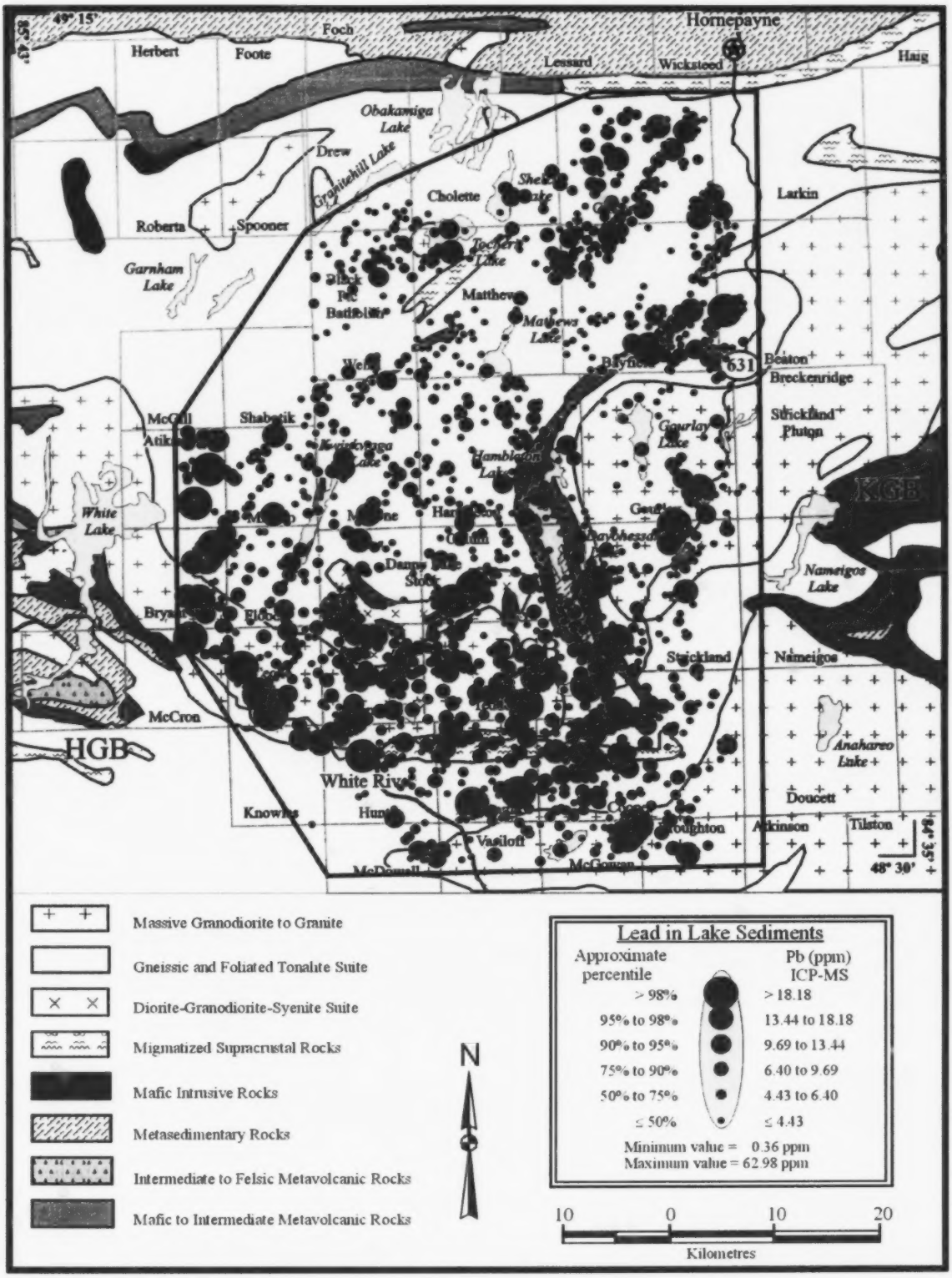
Proportional dot map of niobium in lake sediments



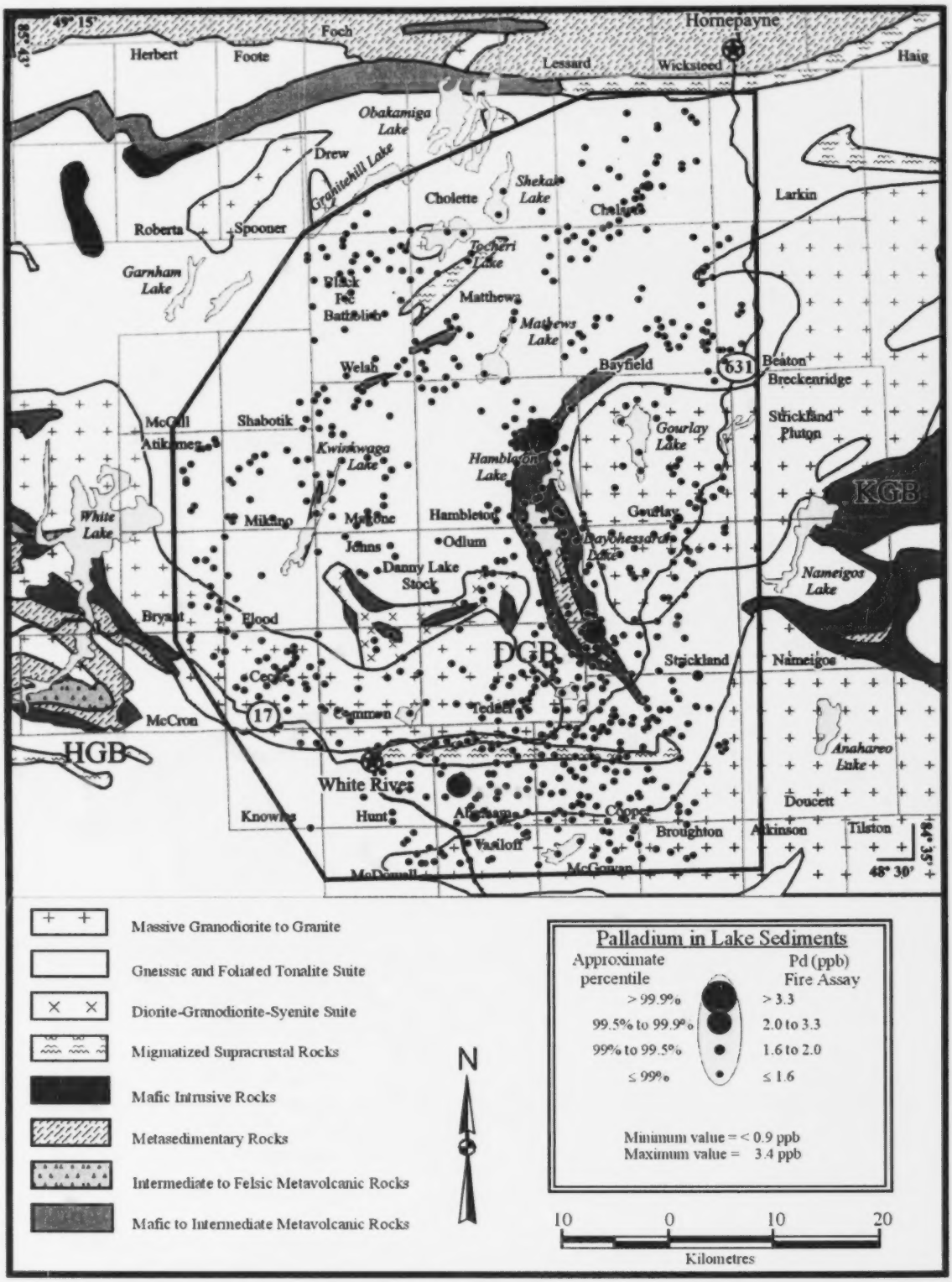
Proportional dot map of nickel in lake sediments



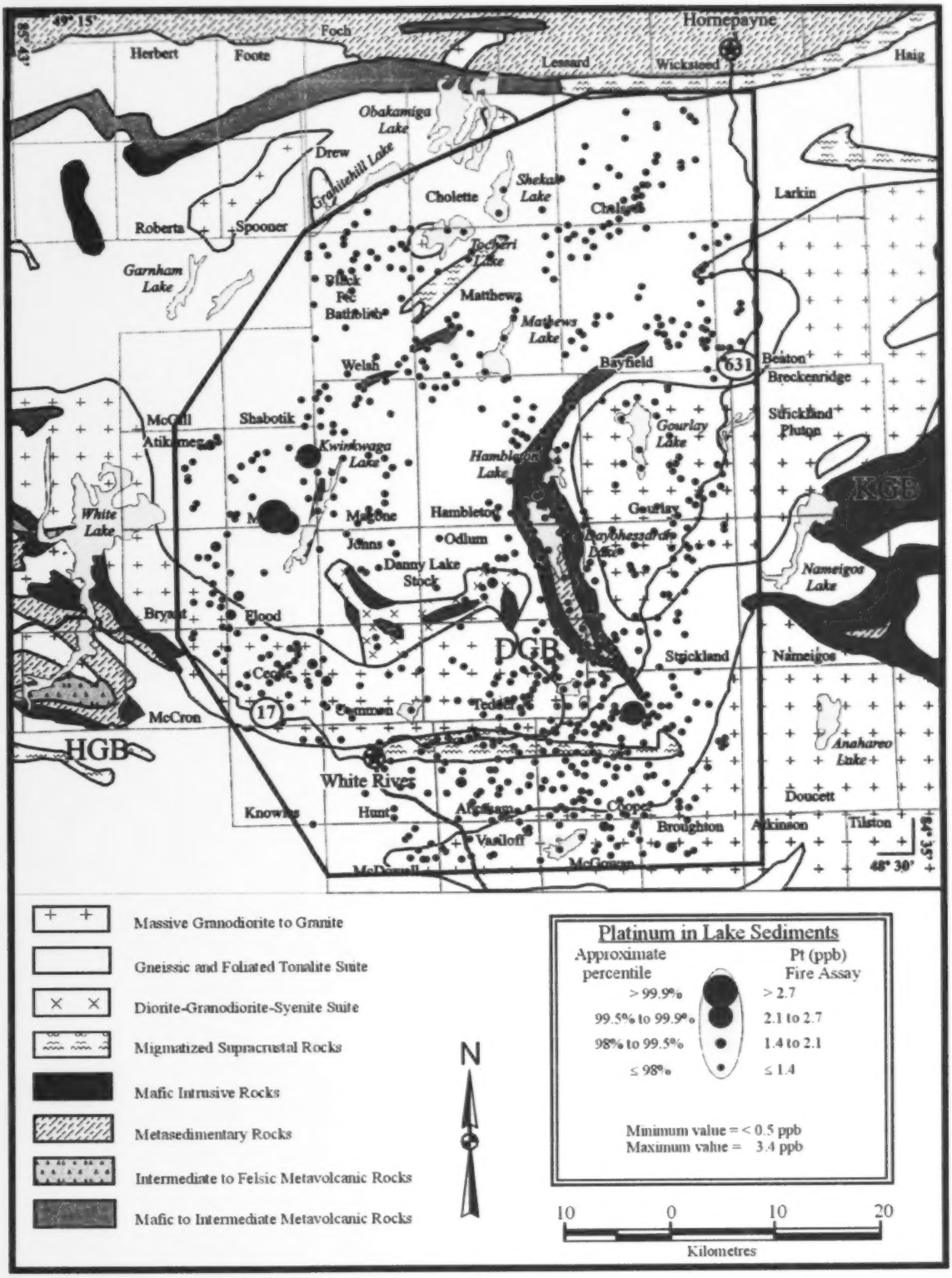
Proportional dot map of phosphorus in lake sediments



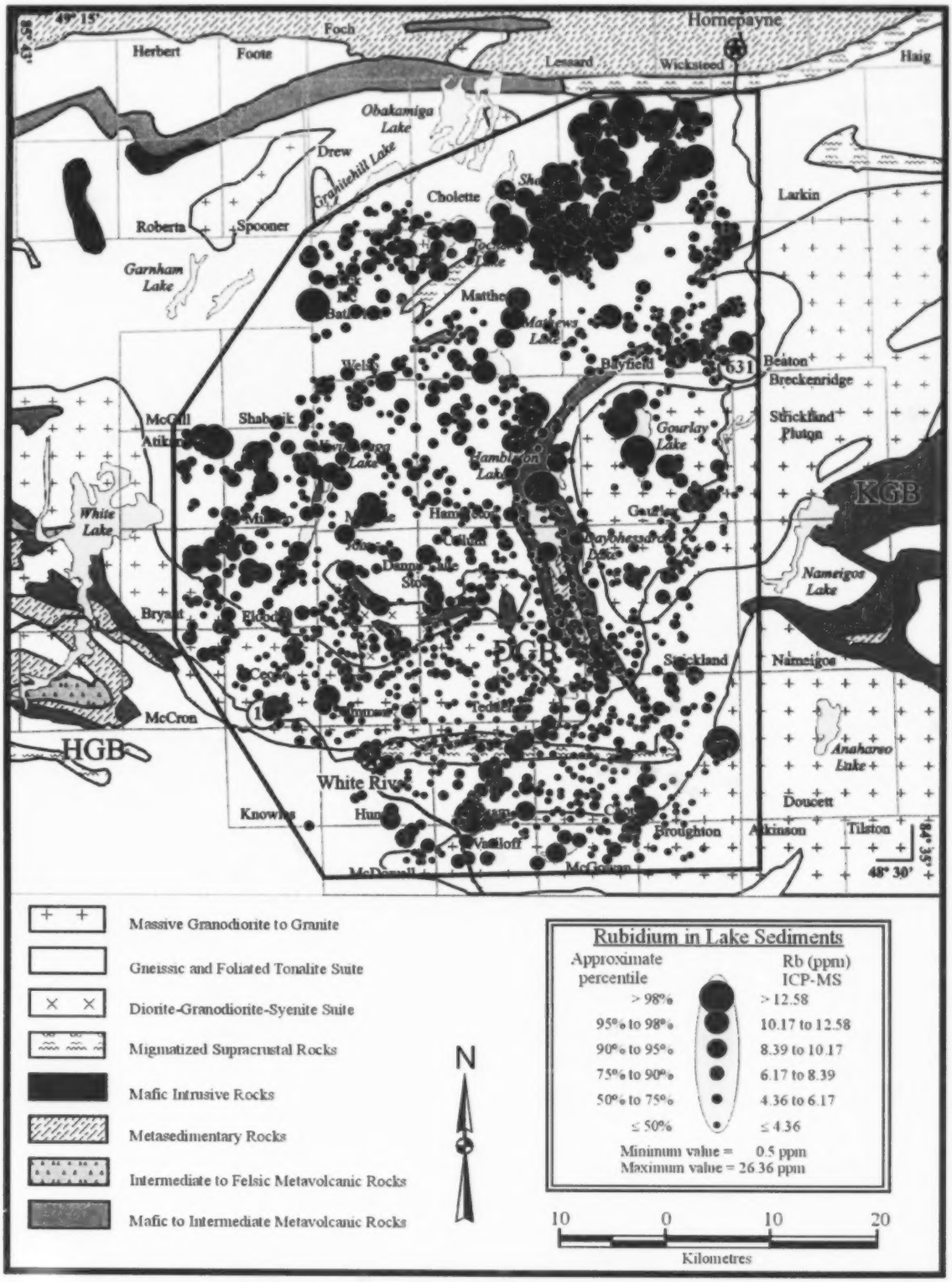
Proportional dot map of lead in lake sediments



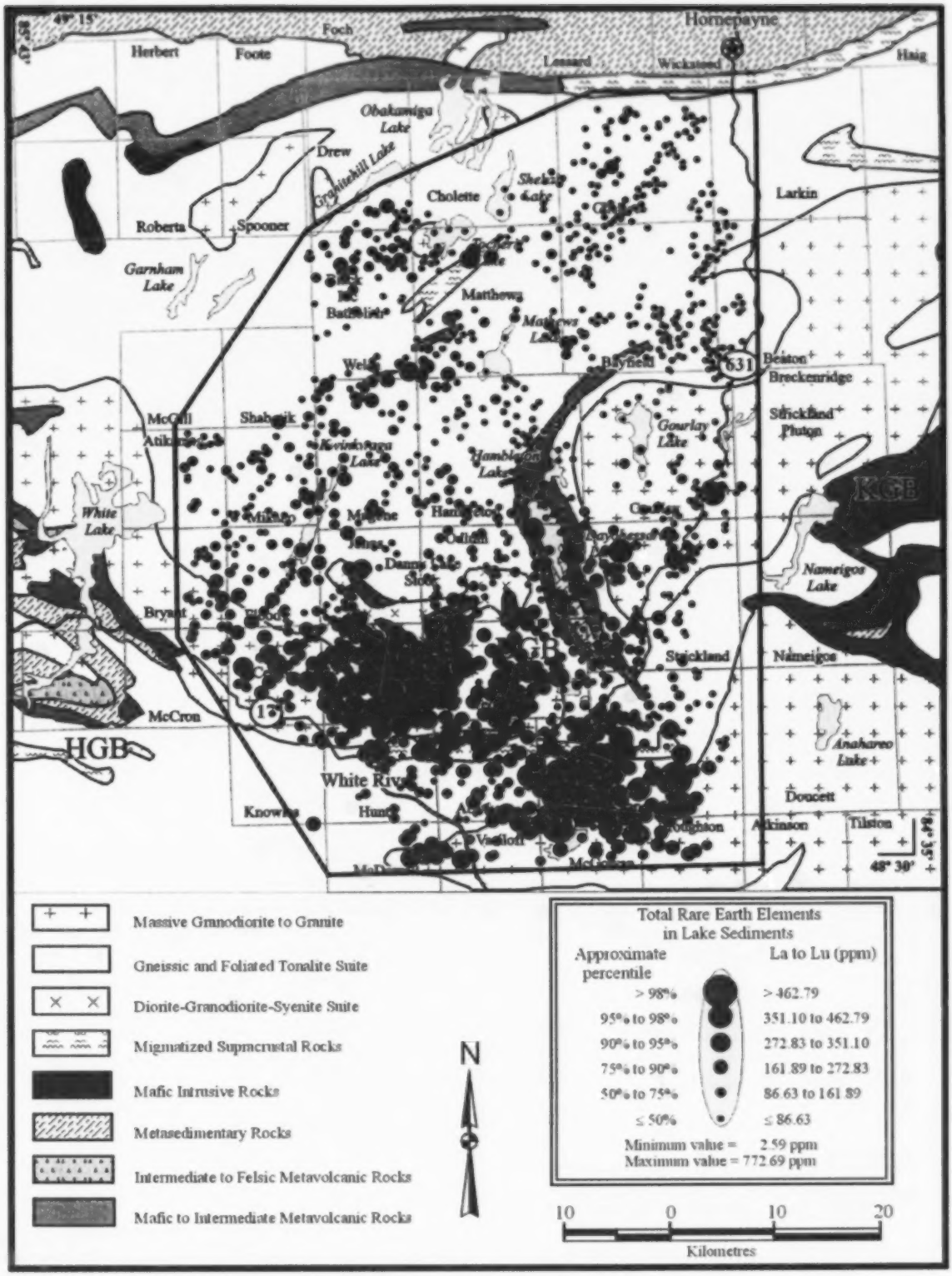
Proportional dot map of palladium in lake sediments



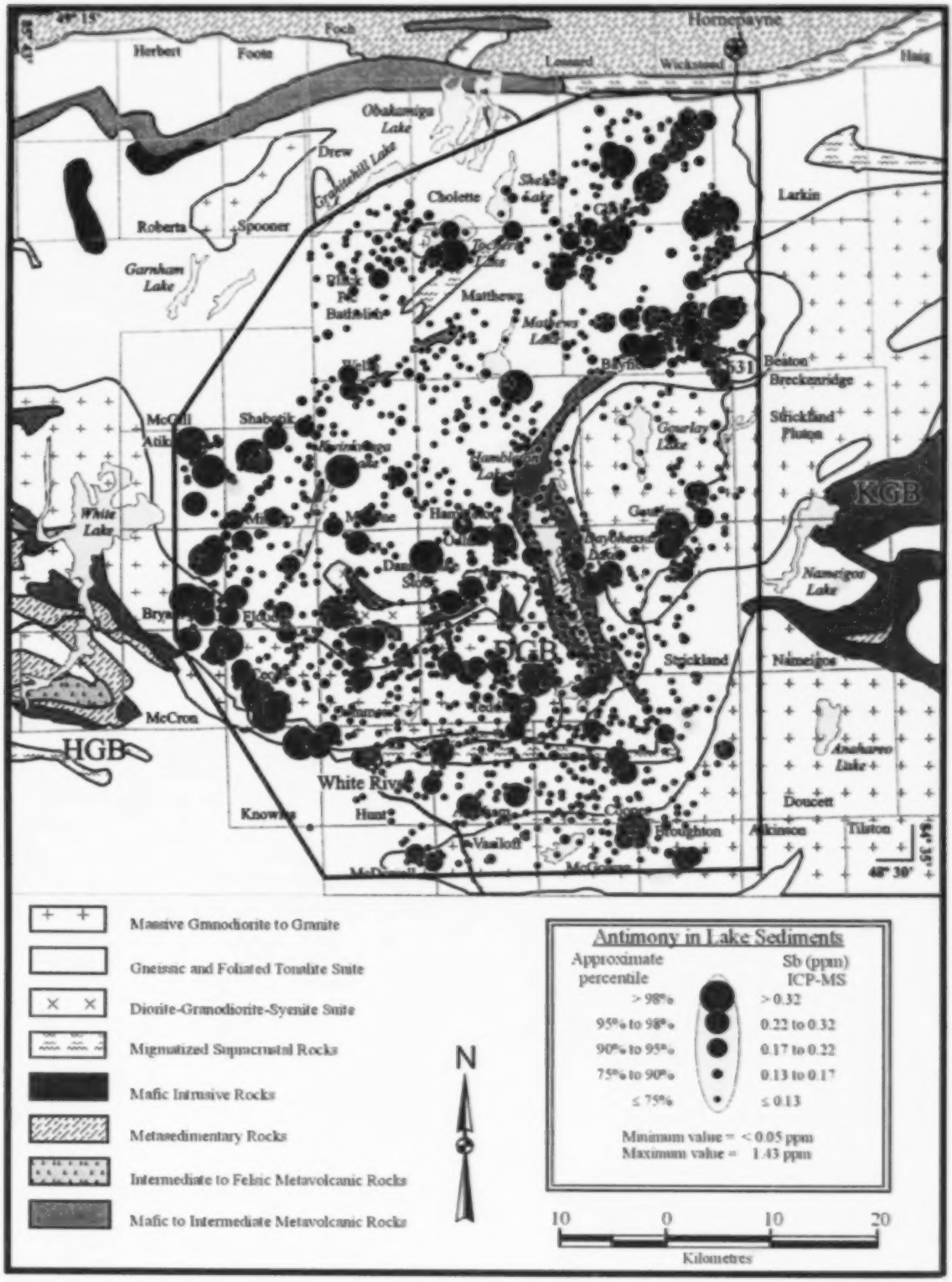
Proportional dot map of platinum in lake sediments



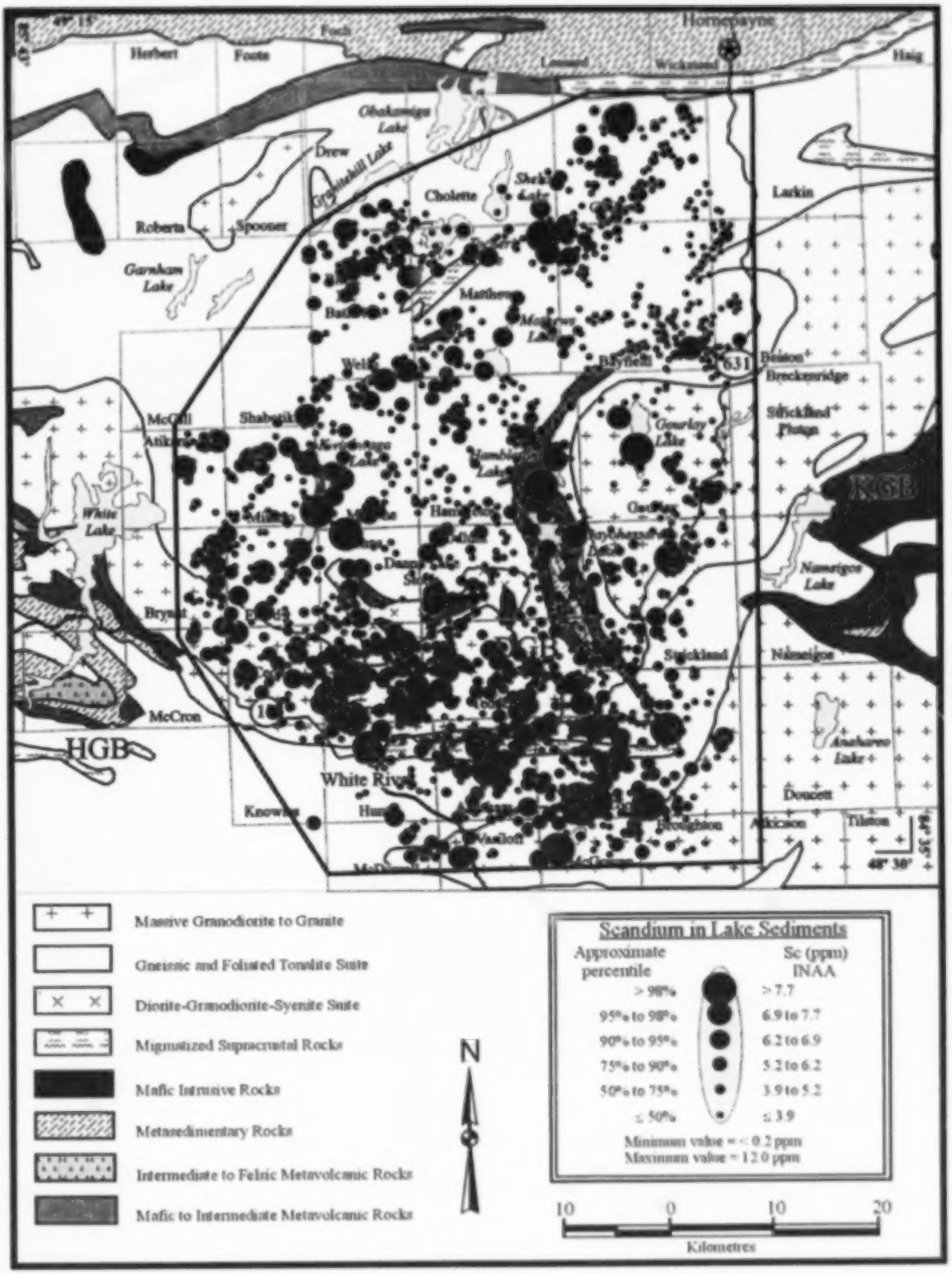
Proportional dot map of rubidium in lake sediments



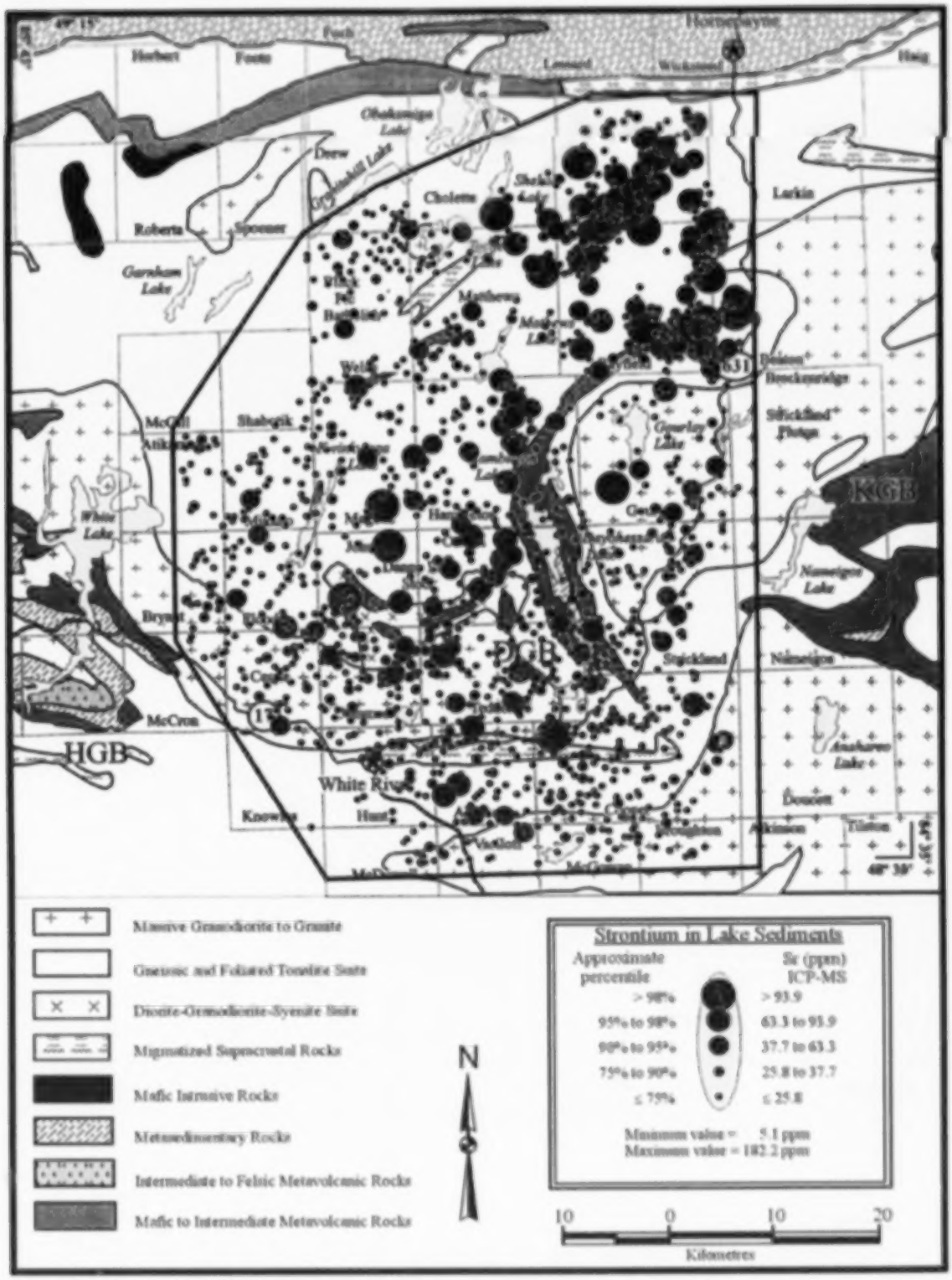
Proportional dot map of total rare earth elements in lake sediments



Proportional dot map of antimony in lake sediments

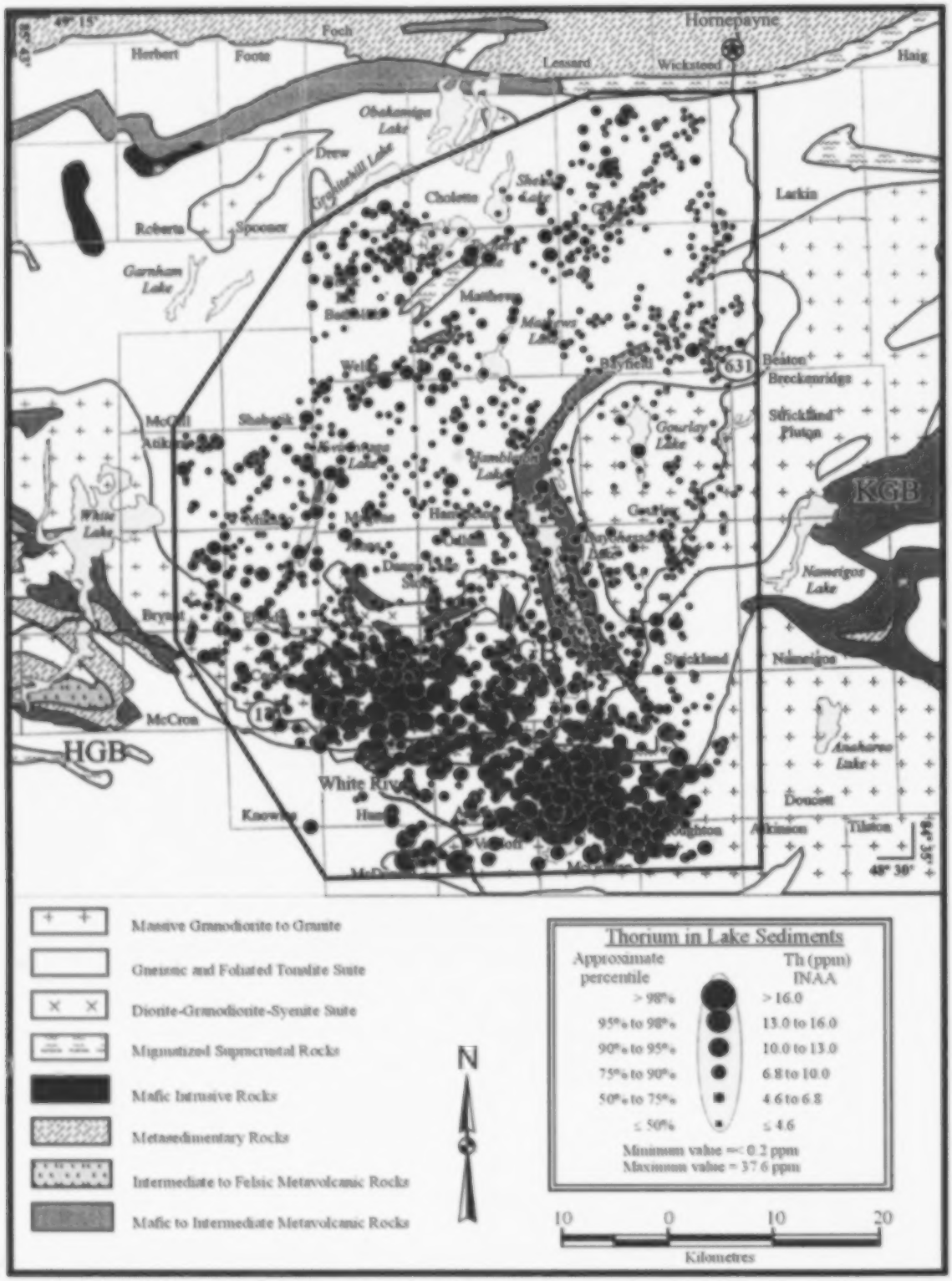


Proportional dot map of scandium in lake sediments

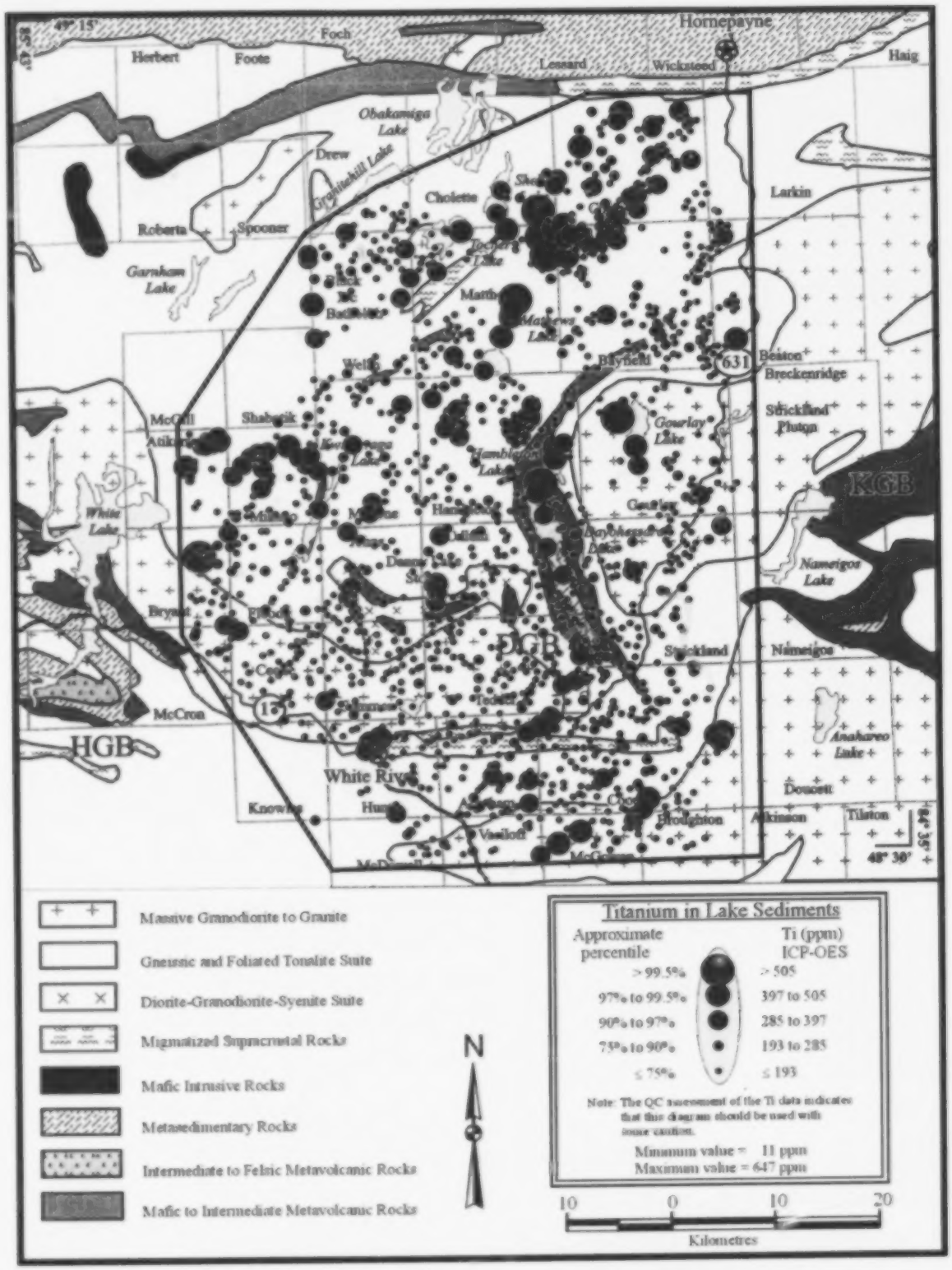


Proportional dot map of strontium in lake sediments

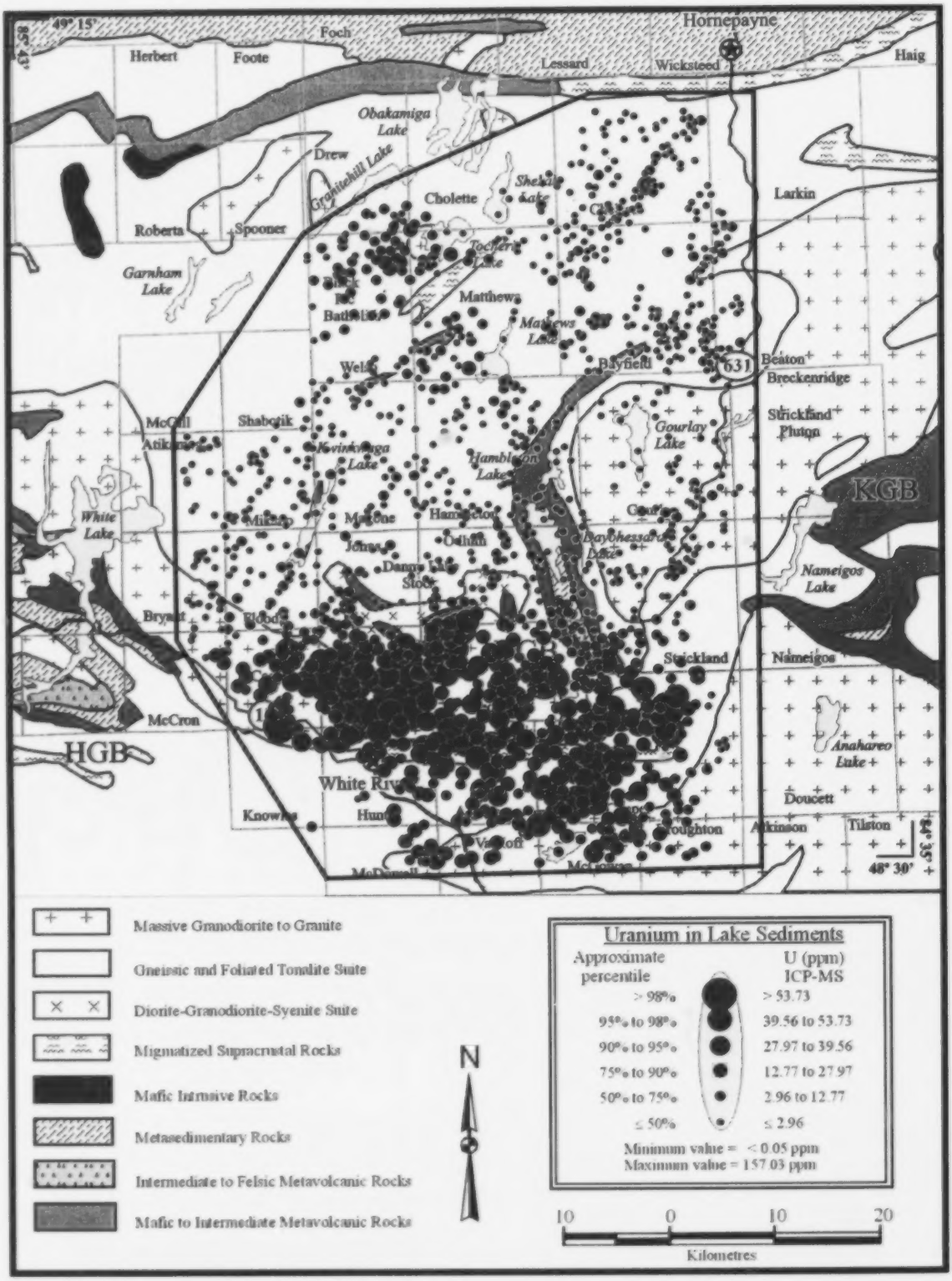
Proportional dot map of tantalum in lake sediments



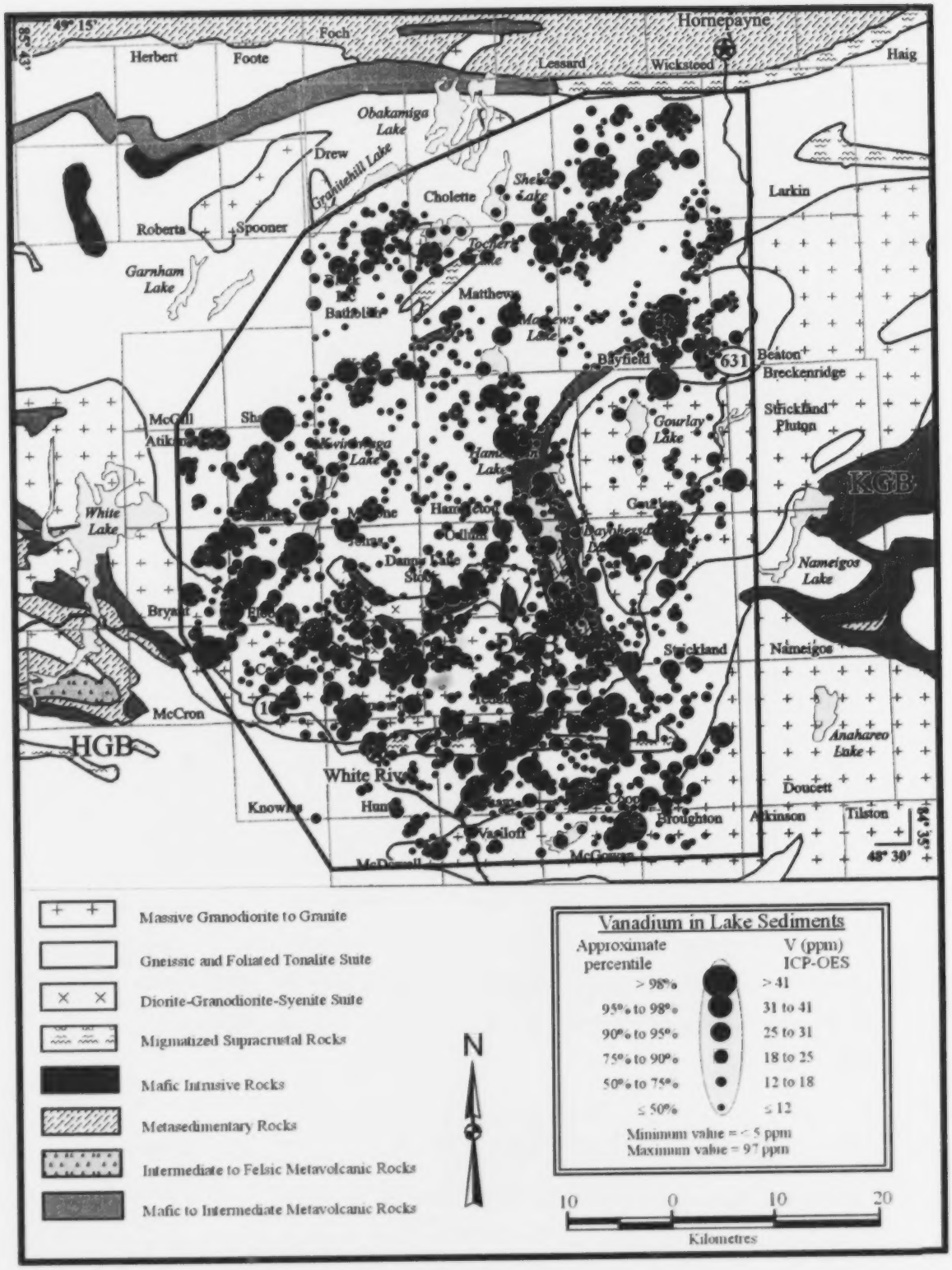
Proportional dot map of thorium in lake sediments



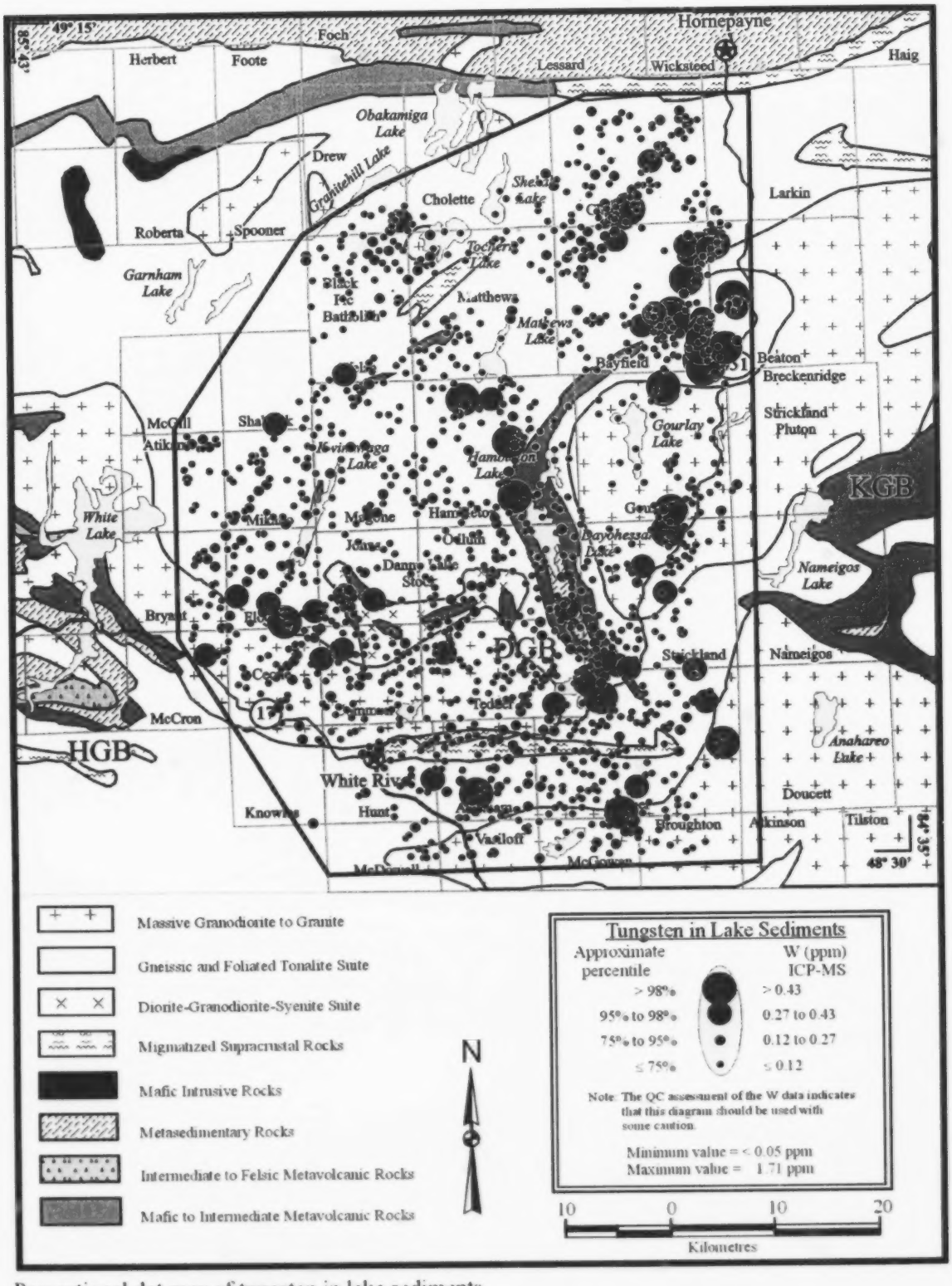
Proportional dot map of titanium in lake sediments



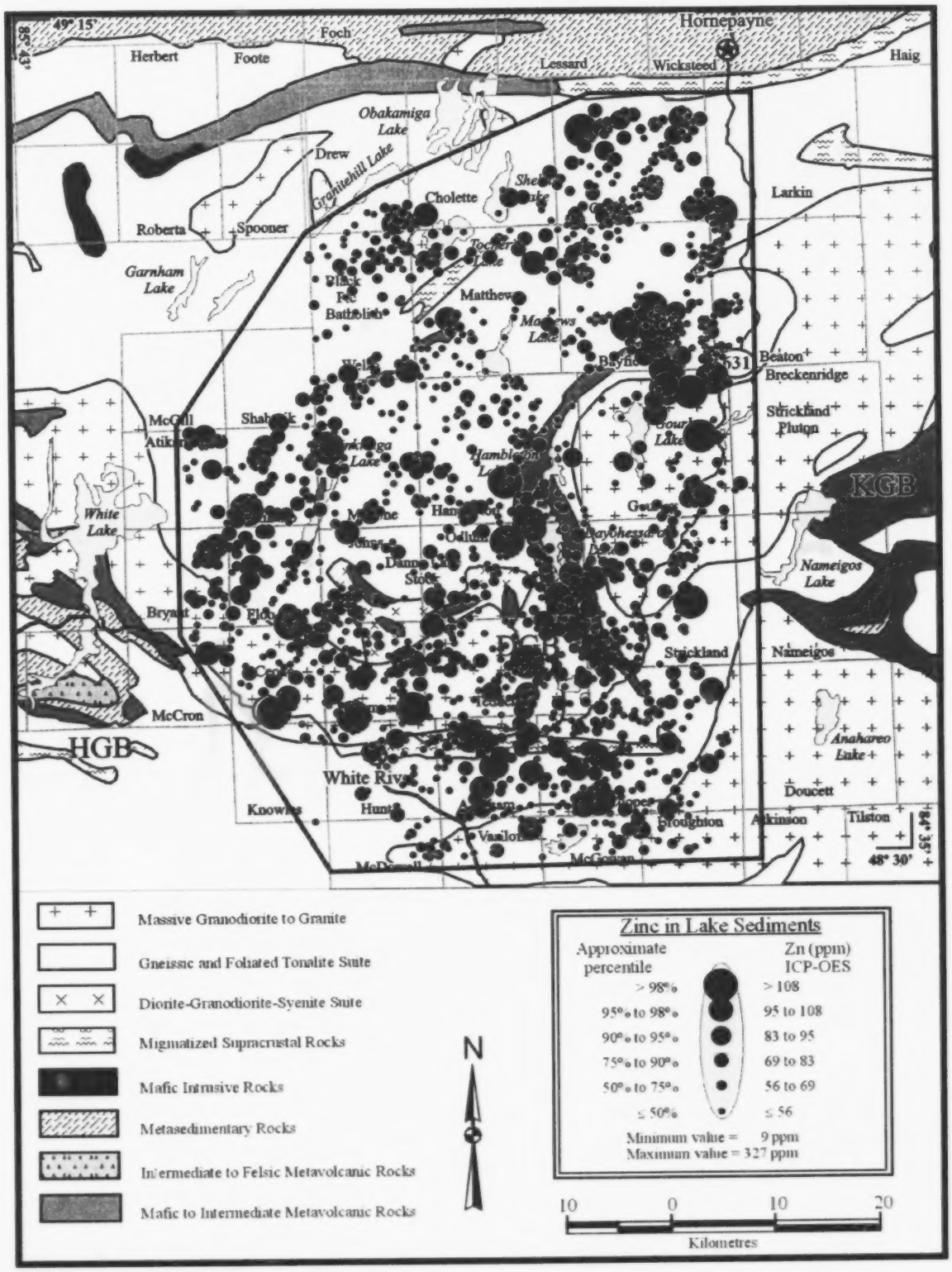
Proportional dot map of uranium in lake sediments



Proportional dot map of vanadium in lake sediments



Proportional dot map of tungsten in lake sediments



Proportional dot map of zinc in lake sediments

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APPENDIX C

Selected lake sediment analyses for Ag, As, Au (INAA), Au (FA),
Co, Cr, Cu, Fe, Ni, Pd, Pt, REE, Zn and LOI
UTM coordinates are in North American Datum (NAD) 27, Zone 16

Site	Easting	Northing	Ag	As	Au	Au	Co	Cr	Cu	Fe	Ni	Pd	Pt	Total	Zn	LOI
	NAD 27	Method----->	ICP-MS	INAA	FA	INAA	ICP-MS	ICP-OES	ICP-OES	ICP-OES	ICP-MS	FA	FA	REEs	ICP-OES	Grav.
	UTM Zone 16	Units----->	ppm	ppm	ppb	ppb	ppm	ppm	ppm	ppm	ppm	ppb	ppb	La to Lu	ppm	%
		D. L.----->	0.02	0.5	0.9	2	0.05	4	5	5	0.5	0.9	0.5		2	0.05
1	627240	5384710	0.09	2.4	-0.9	-2	4.64	27	16	14841	10.8	-0.9	-0.5	205.49	50	14.47
2	628275	5385093	0.04	1.3	-0.9	-2	2.98	16	9	6534	7.3	-0.9	-0.5	117.19	26	7.57
3	628236	5384327	0.07	2.6	-0.9	-2	2.98	22	35	6911	15.8	-0.9	-0.5	273.19	43	40.4
4	628709	5382629	0.05	1.8	-0.9	-2	2.27	14	25	4009	11.5	-0.9	-0.5	127.42	43	43.56
5	629322	5383369	0.09	2.2	-0.9	-2	4.42	22	26	6868	13.7	-0.9	-0.5	155.85	67	46.8
6	630368	5383701	0.02	2.2	INF	-2	0.85	5	11	1409	4.5	INF	INF	60.38	18	45.71
7	631237	5381837	0.09	2.1	INF	-2	3.5	13	34	4292	9.5	INF	INF	120.88	49	65.81
8	631262	5382437	0.05	2.2	-0.9	-2	1.75	12	30	2182	7.9	-0.9	-0.5	135.53	37	56.03
9	631211	5380931	0.05	1.9	-0.9	-2	4.12	16	22	5553	9.7	-0.9	-0.5	160.66	43	36.06
10	630841	5381148	0.08	1.9	INF	-2	4.18	12	50	3170	13.3	INF	INF	116.24	58	67.42
11	630202	5380829	0.06	1.5	2.8	-2	2.34	10	24	2714	6.4	-0.9	-0.5	84.7	51	65.48
12	632794	5380088	0.07	2.5	-0.9	-2	1.58	9	51	1656	8.8	-0.9	-0.5	155.43	41	44.3
13	631990	5380292	0.07	1.5	INF	-2	2.46	13	29	5573	7.7	INF	INF	152.95	48	64.56
14	634479	5380190	0.07	2.6	-0.9	-2	3.43	15	31	4945	10.0	-0.9	0.51	104.47	36	56.59
15	633343	5381365	0.08	3.1	INF	-2	2.83	15	36	6668	10.6	INF	INF	86.31	49	70.22
16	634058	5382476	0.08	2	1.06	-2	2.31	13	51	5322	10.0	-0.9	-0.5	155.56	45	51.78
17	633535	5382437	0.08	2.2	INF	-2	2.03	14	41	3921	9.0	INF	INF	145.07	48	50.15
18	634339	5383139	0.14	2.9	-0.9	-2	5.19	26	61	6036	10.5	-0.9	-0.5	263.18	67	41.91
19	635922	5381161	0.04	2.7	-0.9	-2	2	13	32	6048	11.4	2.24	2	44.39	53	41.98
20	636088	5382233	0.14	2.1	1.24	-2	4.08	27	34	11210	10.0	-0.9	-0.5	242.47	82	39.69
21	636982	5379182	0.13	4.4	-0.9	-2	4.92	26	37	10730	10.6	-0.9	-0.5	171.13	79	34.96
22	637454	5380037	0.14	6.4	-0.9	-2	5.86	36	77	15102	18.4	-0.9	-0.5	184.29	81	43.84
23	637773	5380267	0.07	3.4	-0.9	-2	2	17	21	3236	10.4	-0.9	-0.5	29.67	105	71.37
24	637978	5380612	0.07	5.4	INF	-2	2.26	15	43	3416	9.4	INF	INF	35.98	60	69.27
25	639344	5379973	0.08	2.3	-0.9	-2	3.04	19	23	5632	11.6	-0.9	-0.5	133.07	57	39.94
26	639548	5380675	0.08	2.1	-0.9	-2	3.82	24	24	9167	11.9	-0.9	-0.5	138.94	57	27.79
27	638782	5381352	0.02	1.6	-0.9	-2	2.44	14	13	6631	7.4	-0.9	-0.5	81.07	30	14.27
28	640237	5381199	0.08	2.6	-0.9	-2	2.87	19	32	6326	11.3	-0.9	-0.5	145.49	41	35.1
29	641399	5380369	0.1	3.7	-0.9	-2	2.2	14	38	3590	9.5	-0.9	-0.5	137.57	64	44.67
30	642203	5380892	0.05	1.2	-0.9	-2	2.89	14	34	7734	6.9	-0.9	-0.5	101.9	33	11.67
31	644565	5380522	0.1	2.2	-0.9	-2	2.68	17	36	2643	11.4	-0.9	-0.5	260.93	47	47.03
32	643416	5380624	0.18	2.8	-0.9	-2	5.22	21	37	8059	10.0	-0.9	-0.5	323.11	69	46.8
33	643799	5381288	0.08	2	-0.9	-2	4.55	15	24	5046	8.8	-0.9	-0.5	401.65	59	31.96
34	645255	5381939	0.09	2.1	-0.9	-2	3.49	12	23	3059	9.6	-0.9	-0.5	613.38	65	40.83
35	645587	5380126	0.13	2.2	INF	-2	6.92	19	31	4924	14.7	INF	INF	258.68	53	59.88
36	645587	5380637	0.06	2.2	-0.9	-2	2.31	10	21	2303	11.6	-0.9	-0.5	203.24	57	54.67
37	647157	5380331	0.1	1.7	-0.9	-2	2.54	15	22	3699	7.7	-0.9	-0.5	341.05	33	24.76
38	648842	5380114	0.2	INF	INF	INF	4.95	37	35	12478	14.0	INF	INF	507.44	92	36.64
39	647949	5380165	0.11	1.2	-0.9	-2	3.94	13	37	2538	8.9	-0.9	-0.5	772.69	41	30.34
40	648447	5380369	0.21	INF	INF	INF	2.1	19	26	2467	8.5	INF	INF	579.79	26	41.69
41	648600	5380637	0.1	-0.5	INF	-2	2.88	13	24	1628	11.6	INF	INF	719.78	47	36.56
42	648281	5381722	0.1	2	INF	-2	3	13	27	2065	9.9	INF	INF	628.76	79	48.83
43	647476	5381837	0.07	0.6	-0.9	-2	2.4	9	17	2948	6.6	-0.9	-0.5	311.51	37	34.51
44	649251	5381071	0.06	1.1	-0.9	-2	4.69	19	14	10970	6.7	-0.9	-0.5	245.86	56	10.44
45	650362	5381735	0.07	1.7	-0.9	-2	3.12	17	20	5096	8.9	-0.9	-0.5	224.21	63	25.31
46	650834	5379450	0.08	1.7	-0.9	-2	3.24	10	20	2240	10.2	-0.9	-0.5	211.21	54	45
47	650617	5379973	0.13	2.6	INF	-2	3.76	14	32	3152	10.7	INF	INF	328.57	66	54.46
48	651817	5379935	0.06	1.9	-0.9	-2	1.05	6	22	1124	4.9	-0.9	-0.5	83.54	43	46.52
49	652711	5380229	0.06	2.1	-0.9	-2	2.31	17	36	5777	9.6	-0.9	-0.5	212.18	42	32.68
50	652685	5380446	0.14	4.3	-0.9	-2	2.19	24	91	5373	10.5	-0.9	-0.5	369.33	58	51.56
51	655175	5381071	0.09	2	-0.9	-2	4.73	18	39	7111	12.1	-0.9	-0.5	293.22	68	62.97
52	656017	5379973	0.11	1.8	-0.9	-2	6.04	19	32	11201	10.8	-0.9	-0.5	312.46	66	54.85
53	661558	5381773	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
54	659043	5382514	0.12	2.5	-0.9	-2	3.24	22	37	8193	11.4	-0.9	-0.5	189.16	89	63.69
55	656043	5381646	0.12	1.8	INF	-2	5.52	20	37	6809	12.6	INF	INF	581.79	57	66.3
56	646787	5382131	0.07	2.1	-0.9	-2	2.47	10	31	2584	8.6	-0.9	-0.5	376.29	96	53.31
57	632140	5384277	0.1	2.8	-0.9	-2	4.42	20	37	5493	14.3	-0.9	-0.5	306.84	48	40.89
58	638668	5382401	0.14	4.8	-0.9	-2	5.98	32	39	16820	14.0	-0.9	-0.5	206.43	105	35.16
59	642410	5381779	0.19	2.1	-0.9	-2	6.69	25	37	13258	9.2	-0.9	-0.5	438	97	36.4
60	646376	5382713	0.12	2	-0.9	-2	3.43	17	27	6416	9.4	-0.9	-0.5	406.47	72	70.23
61	649656	5382921	0.18	3.4	-0.9	-2	5.66	25	33	10123	12.1	-0.9	-0.5	594.52	90	39.79
62	651587	5382562	0.13	3.5	-0.9	-2	3.74	24	31	6981	10.5	-0.9	-0.5	234.95	69	42.09
63	653462	5381210	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Site	Easting	Northing	Ag	As	Au	Au	Co	Cr	Cu	Fe	Ni	Pd	Pt	Total	Zn	LOI
	NAD 27	Method------->	ICP-MS	INAA	FA	INAA	ICP-MS	ICP-OES	ICP-OES	ICP-OES	ICP-MS	FA	FA	REEs	ICP-OES	Grav.
	UTM Zone 16	Units------->	ppm	ppm	ppb	ppb	ppm	ppm	ppm	ppm	ppm	ppb	ppb	La to Lu	ppm	%
		D. L.------->	0.02	0.5	0.9	2	0.05	4	5	5	0.5	0.9	0.5		2	0.05
64	653398	5381656	0.05	2.3	-0.9	-2	2.88	16	24	6921	7.8	-0.9	-0.5	120.07	40	23.87
65	653974	5381886	0.1	1.9	-0.9	-2	4.04	22	18	7720	8.0	-0.9	-0.5	301.54	54	26.78
66	653559	5382884	0.05	1.9	-0.9	-2	3.49	18	15	7332	7.7	-0.9	-0.5	122.5	45	23.59
67	657653	5382330	0.12	3.2	-0.9	-2	6.54	26	34	9045	13.0	-0.9	-0.5	272.22	57	49.67
68	660095	5383437	0.03	1.5	INF	-2	1.17	4	13	1369	3.5	INF	INF	14.18	65	89.61
69	660409	5384496	0.03	2.2	-0.9	-2	3.23	23	23	8352	11.2	-0.9	-0.5	73.81	36	32.74
70	660737	5384856	0.05	6.2	-0.9	-2	3.16	27	32	15694	10.5	-0.9	-0.5	67.17	64	42.87
71	660779	5385457	0.05	1.8	-0.9	-2	4.68	27	13	12641	12.6	-0.9	-0.5	76.49	45	18.52
72	660193	5385201	-0.02	1.7	-0.9	-2	3.95	26	13	22714	11.9	-0.9	-0.5	65.8	36	11.42
73	656483	5383918	0.07	3.6	-0.9	-2	3.85	24	29	6056	11.7	-0.9	-0.5	277.39	40	46.2
74	655132	5384608	0.05	1.7	INF	-2	0.91	6	9	1276	4.3	INF	INF	17.38	95	84.66
75	656637	5386092	-0.02	1.6	-0.9	-2	2.21	12	7	4899	4.2	-0.9	-0.5	60.09	21	6.14
76	655564	5386267	0.13	2.8	-0.9	-2	3.55	20	73	3821	9.7	-0.9	-0.5	290.47	42	48.2
77	655252	5386353	0.14	3.2	-0.9	-2	3.54	17	62	2929	10.8	-0.9	-0.5	223.59	58	59.92
78	655749	5386571	0.08	1.4	-0.9	-2	2.12	13	25	3832	6.6	-0.9	-0.5	110.21	44	28.32
79	653053	5384921	0.06	2.6	-0.9	-2	5.02	17	21	7358	8.7	-0.9	-0.5	158.35	57	31.38
80	651650	5384007	0.07	2.2	-0.9	-2	1.77	11	33	2858	8.2	-0.9	-0.5	227.2	40	33.79
81	650547	5382504	0.08	2	-0.9	-2	2.55	13	20	1795	8.8	-0.9	-0.5	433.08	41	39.47
82	650867	5383980	0.2	3.8	-0.9	-2	8.02	21	36	10220	11.2	-0.9	-0.5	365.51	68	45
83	650908	5384631	0.28	3	-0.9	-2	6.37	23	55	11794	13.6	-0.9	-0.5	407.18	53	52.92
84	650979	5385391	0.26	2.4	-0.9	-2	8.92	21	48	9534	11.2	-0.9	-0.5	361.31	66	48.59
85	652698	5386723	0.08	2.6	INF	4	2.1	10	36	2707	6.9	INF	INF	103.09	46	63.2
86	653243	5386598	0.06	2.5	-0.9	-2	2.25	9	24	2181	6.7	-0.9	-0.5	155.95	28	44
87	653163	5386757	0.06	2.6	-0.9	-2	1.96	6	23	1182	7.0	-0.9	-0.5	74.45	44	54.38
88	653484	5386959	0.06	3.8	-0.9	-2	1.83	9	45	1980	9.5	-0.9	-0.5	92.36	50	56.16
89	652049	5387284	0.06	2.2	-0.9	-2	4.18	16	24	4328	13.0	-0.9	-0.5	199.87	58	47.94
90	649764	5385682	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
91	650260	5383647	0.12	1.7	-0.9	-2	4.96	10	29	2205	9.1	-0.9	-0.5	666.08	55	41.75
92	648547	5383310	0.1	3.5	-0.9	-2	8.13	18	22	7169	12.6	-0.9	-0.5	330.01	93	57.64
93	648826	5383843	0.1	1.8	-0.9	-2	6.29	16	28	4821	10.7	-0.9	-0.5	286.84	79	66.53
94	648240	5384036	0.11	2.3	-0.9	-2	5.98	15	34	3339	14.2	-0.9	-0.5	293.18	70	64.69
95	648150	5384824	0.1	3.2	-0.9	-2	2.56	9	30	2513	6.7	-0.9	-0.5	151.82	46	60.82
96	647499	5386081	0.07	2.2	-0.9	-2	7.28	18	23	5881	15.5	-0.9	-0.5	294.48	42	41.49
97	648593	5385837	0.12	2.6	-0.9	-2	5.96	22	29	7783	11.5	-0.9	-0.5	224.58	64	45.54
98	649812	5386542	0.13	2.8	-0.9	-2	6.84	24	27	10788	10.8	-0.9	-0.5	247.5	69	33.93
99	649002	5386533	0.08	1.6	-0.9	-2	2.83	13	19	3288	9.0	-0.9	-0.5	155.79	41	42.21
100	649264	5386994	0.14	1.7	-0.9	-2	5.28	18	36	4986	10.3	-0.9	-0.5	252	47	44.68
101	648340	5386828	0.29	3.1	-0.9	-2	9.28	25	41	8765	11.5	-0.9	-0.5	392.62	59	53.18
102	635869	5385355	0.05	2.1	-0.9	-2	1.76	11	24	2875	10.7	-0.9	-0.5	160.87	44	34.41
103	640945	5384626	0.07	3.5	-0.9	-2	3.57	18	43	10170	12.2	-0.9	0.69	61.99	55	39.64
104	643740	5386188	0.04	1.5	-0.9	-2	4.42	21	12	13793	9.0	-0.9	-0.5	99.76	40	10.87
105	644920	5388659	0.06	4.9	-0.9	-2	3.88	25	34	6991	13.5	-0.9	-0.5	82.95	79	45.79
106	647477	5388778	0.07	2.4	-0.9	-2	5.18	26	28	11554	12.1	-0.9	-0.5	132.96	61	19.93
107	648821	5388106	0.11	2.3	INF	-2	7.28	39	29	6257	21.6	INF	INF	202.4	73	55.14
108	649061	5388618	0.05	1.7	-0.9	-2	2.32	16	24	2616	10.7	-0.9	-0.5	132.71	38	37.08
109	649284	5389394	0.06	2.2	-0.9	-2	2.67	18	39	4507	10.2	-0.9	-0.5	116.87	33	37.35
110	650383	5388593	0.05	1.8	-0.9	-2	4.52	12	19	3302	9.6	-0.9	-0.5	136.76	65	49.64
111	650274	5387977	0.1	1.6	-0.9	-2	4.37	14	20	4559	11.6	-0.9	-0.5	110.6	56	59.02
112	650535	5388022	0.17	2.6	-0.9	-2	4.45	16	25	10281	11.1	-0.9	-0.5	144.99	68	61.99
113	650130	5387413	0.13	1.8	-0.9	-2	5.82	13	29	4380	13.3	-0.9	-0.5	246.4	53	56.29
114	651110	5387421	0.1	1.6	-0.9	-2	5.08	12	25	3751	14.7	-0.9	-0.5	204.53	28	50.66
115	652207	5387902	0.06	1.5	0.96	-2	2.34	11	17	2728	10.8	-0.9	2.26	137.04	21	44.26
116	653503	5387517	0.05	3.8	-0.9	-2	1.74	9	44	2041	9.3	-0.9	-0.5	62.73	64	65.25
117	654000	5387866	0.05	2.4	-0.9	-2	1.66	10	30	1873	7.9	-0.9	-0.5	70.03	63	60.53
118	654371	5387543	0.07	1.7	-0.9	6	1.86	9	26	2099	6.1	-0.9	-0.5	79.91	57	78.61
119	655658	5387772	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
120	655524	5388608	0.11	2.8	-0.9	-2	1.98	13	57	2409	8.0	-0.9	-0.5	110.75	73	64.73
121	654707	5388627	0.04	2.3	-0.9	-2	2.73	17	26	7313	9.1	-0.9	-0.5	83.83	60	43.83
122	653591	5388742	0.08	2.7	0.9	-2	3.96	22	44	7524	10.2	-0.9	-0.5	149.46	65	38.21
123	653442	5389644	0.04	2.2	1.68	-2	2.4	13	21	4634	9.4	-0.9	-0.5	54.78	42	60.5
124	653212	5390421	0.06	2.2	INF	-2	2.12	14	33	3974	8.9	INF	INF	78.08	65	61.58
125	654574	5392427	0.06	1.8	1.97	-2	2.67	13	35	3191	13.1	-0.9	-0.5	65.56	42	70.51
126	655873	5391521	0.13	3.6	1.34	-2	4.88	27	50	11972	13.1	-0.9	-0.5	144.85	70	52.78

Site	Easting NAD 27 UTM Zone 16	Northing Method-----> Units-----> D. L.----->	Ag ICP-MS ppm 0.02	As INAA ppm 0.5	Au FA ppb 0.9	Au INAA ppb 2	Co ICP-MS ppm 0.05	Cr ICP-OES ppm 4	Cu ICP-OES ppm 5	Fe ICP-OES ppm 5	Ni ICP-MS ppm 0.5	Pd FA ppb 0.9	Pt FA ppb 0.5	Total REEs La to Lu	Zn ICP-OES ppm 2	LOI Grav: % 0.05
127	655974	5390477	0.02	3.1	1.86	-2	2.44	15	13	4066	8.1	-0.9	-0.5	30.04	65	60.49
128	656393	5389611	0.09	1.5	1.78	-2	5.43	19	31	5076	13.8	-0.9	-0.5	129.32	56	45.77
129	658022	5388931	0.03	1.7	-0.9	-2	1.24	18	23	2020	5.6	-0.9	-0.5	12.895	15	7.11
130	657337	5388473	0.08	2.9	INF	-2	2.87	16	34	3391	9.0	INF	INF	69.28	63	61.16
131	657326	5387169	-0.02	2.9	2.26	-2	1.15	18	22	2835	7.5	-0.9	-0.5	24.35	39	28.67
132	659207	5388724	-0.02	7.2	1.51	-2	1.57	15	12	14575	5.4	-0.9	-0.5	34.53	44	54.48
133	659641	5389842	0.04	2.1	INF	-2	1.71	17	11	3112	8.1	INF	INF	26.44	104	72.03
134	658095	5391475	0.06	1	INF	-2	.3	16	25	3122	11.0	INF	INF	65.06	78	57.73
135	658247	5391469	0.07	1.4	INF	-2	4.1	17	30	2151	16.6	INF	INF	84.02	55	64.96
136	658272	5391847	0.05	6.3	-0.9	-2	3.43	17	54	4423	10.2	1.68	0.83	45.34	55	62.58
137	657869	5392093	0.05	2.6	INF	-2	3.22	22	21	6347	8.7	INF	INF	45.15	68	51.88
138	656683	5393019	0.07	5.3	1.31	-2	3.56	23	54	9224	17.3	-0.9	-0.5	111.32	62	48.57
139	656924	5395006	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
140	656958	5395542	0.08	5.9	-0.9	-2	2.83	19	101	5015	9.7	-0.9	-0.5	70.2	41	37.99
141	656869	5395783	0.03	3.6	INF	-2	1.19	10	28	6244	6.4	INF	INF	50.49	57	74.76
142	656941	5396029	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
143	656243	5396929	0.04	3.4	-0.9	-2	2.6	19	24	8491	10.2	-0.9	-0.5	160.59	53	38.92
144	656371	5397667	-0.02	3	-0.9	-2	1.11	10	29	3598	6.1	-0.9	-0.5	34.24	26	25.1
145	657580	5398542	0.06	3.6	INF	-2	6.13	8	41	2372	5.9	INF	INF	43.88	137	85.68
146	656950	5399779	0.08	6.2	-0.9	-2	3.95	25	55	10006	13.8	-0.9	-0.5	81.96	79	55.73
147	656129	5400652	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
148	656074	5401368	0.08	4.2	-0.9	-2	1.97	15	37	3574	9.1	-0.9	-0.5	31.17	69	66.25
149	655554	5401353	0.13	4.1	INF	-2	1.95	15	80	4746	8.2	INF	INF	54	52	45.33
150	655338	5398972	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
151	655557	5399446	-0.02	17	-0.9	-2	2.67	17	25	90987	6.3	-0.9	0.53	22.28	41	36.36
152	655296	5399915	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
153	655002	5399496	0.03	3.1	-0.9	-2	2.4	16	21	4816	9.0	-0.9	-0.5	32.35	72	48.43
154	654428	5397158	0.09	2.4	-0.9	-2	4.13	21	42	5454	11.0	-0.9	-0.5	269.79	50	49.12
155	654465	5395689	0.08	2.5	-0.9	-2	2.59	28	47	5001	17.8	-0.9	-0.5	114.2	75	56.09
156	655051	5395142	0.06	INF	INF	INF	2.77	14	22	3959	10.3	INF	INF	81.1	55	72.45
157	651046	5392317	0.06	8.9	INF	-2	2.52	10	32	7192	19.7	INF	INF	75.11	71	79.41
158	644480	5387727	0.03	2.1	INF	-2	1.4	8	10	1881	8.7	INF	INF	24.49	52	76.43
159	633647	5383732	0.14	2.3	-0.9	-2	9.4	16	46	4760	15.3	-0.9	-0.5	230.21	65	49.79
160	639050	5382354	0.18	5.6	-0.9	-2	6.55	32	63	7442	16.4	1.1	0.97	240.67	101	59.13
161	640435	5383271	0.11	3.4	4.88	-2	4.9	25	48	11851	18.3	-0.9	-0.5	176.2	65	46.87
162	642845	5383176	0.07	2.2	-0.9	-2	1.86	11	22	3848	7.9	-0.9	-0.5	278.64	44	37.08
163	645636	5383342	0.14	1.6	-0.9	-2	4.33	14	25	7345	9.7	-0.9	-0.5	329.82	61	69.89
164	647485	5383086	0.12	1.7	-0.9	-2	2.15	8	21	1630	7.7	-0.9	-0.5	345.8	48	44.4
165	646801	5384095	0.15	2.4	-0.9	-2	4.97	17	26	7514	8.5	-0.9	-0.5	259.37	55	40.93
166	647438	5384092	0.14	2.5	INF	-2	7.16	18	31	3558	15.7	INF	INF	332.36	79	68.58
167	646699	5386123	0.16	2.4	-0.9	-2	9.02	25	31	10421	11.6	-0.9	-0.5	261.87	72	44.7
168	646903	5386843	0.07	2.7	-0.9	-2	4.01	16	26	4113	9.2	-0.9	-0.5	177.55	43	32.62
169	646798	5390655	0.05	3.2	-0.9	-2	5.01	24	19	13210	10.2	-0.9	-0.5	110.05	49	11.79
170	647817	5390703	0.06	5.8	-0.9	-2	2.61	21	25	11970	8.4	-0.9	-0.5	52.2	53	27.5
171	648238	5391065	0.04	5.1	-0.9	-2	2.14	14	24	13405	7.4	-0.9	-0.5	31.89	46	29.71
172	647423	5390935	0.08	2.8	INF	-2	3.09	19	30	6145	9.3	INF	INF	60.73	88	62.28
173	647636	5391285	0.06	2.6	INF	-2	1.21	8	41	1318	8.7	INF	INF	37.95	69	71.23
174	649380	5390677	0.06	4.5	-0.9	-2	1.53	13	20	4777	10.9	-0.9	-0.5	37.71	64	48.39
175	649668	5391288	0.11	1.1	4.4	-2	4.99	24	47	7975	16.3	-0.9	-0.5	110.73	72	62
176	649128	5391698	0.06	4.3	-0.9	-2	3.08	16	15	5250	10.3	-0.9	-0.5	37.67	80	65.34
177	648333	5392330	0.06	3.2	INF	-2	2.18	15	34	5926	9.3	INF	INF	85.69	49	55.07
178	648438	5392879	0.08	3	-0.9	-2	4.48	23	32	8679	12.7	-0.9	-0.5	104.54	73	44.12
179	647798	5393787	0.04	5.6	INF	-2	3.52	13	20	17734	5.5	INF	INF	56.8	90	66.79
180	647359	5394079	0.06	2.5	INF	-2	1.68	28	9	6818	12.4	INF	INF	27.96	45	85.39
181	648962	5392454	0.06	2.8	INF	-2	3.72	15	15	5599	11.4	INF	INF	43.46	91	74.43
182	648914	5393010	0.08	3.1	INF	-2	4.66	25	44	9514	18.9	INF	INF	114.9	76	52.15
183	649576	5393889	0.14	3.6	INF	-2	5.8	15	81	5810	21.4	INF	INF	159.83	50	42.82
184	649811	5392947	0.11	3.4	-0.9	-2	4.82	23	56	6361	20.1	-0.9	0.79	92.73	70	51.32
185	650379	5394158	0.3	1.2	0.94	-2	8.27	11	198	3257	29.0	-0.9	-0.5	243.19	64	37.36
186	650970	5394814	0.07	2.3	INF	-2	1.45	10	29	2757	6.0	INF	INF	60.87	62	61.93
187	650573	5395139	0.11	3.7	-0.9	-2	2	8	22	5302	5.1	-0.9	-0.5	146.43	40	70.21
188	650327	5395536	0.09	1.8	-0.9	-2	1.72	8	21	2164	4.8	-0.9	-0.5	48.03	69	71
189	648935	5393983	0.13	3.7	1.3	-2	7.52	22	62	8404	24.2	-0.9	-0.5	138.67	71	48.84

Site	Easting	Northing	Ag	As	Au	Au	Co	Cr	Cu	Fe	Ni	Pd	Pt	Total	Zn	LOI
	NAD 27	Method------->	ICP-MS	INAA	FA	INAA	ICP-MS	ICP-OES	ICP-OES	ICP-OES	ICP-MS	FA	FA	REEs	ICP-OES	Grav.
	UTM Zone 16	Units------->	ppm	ppm	ppb	ppb	ppm	ppm	ppm	ppm	ppm	ppb	ppb	La to Lu	ppm	%
		D. L.------->	0.02	0.5	0.9	2	0.05	4	5	5	0.5	0.9	0.5		2	0.05
190	648682	5394602	0.13	3.9	1.43	-2	4.87	26	76	9277	25.7	-0.9	0.85	118.37	80	54.65
191	647784	5394596	0.03	2	-0.9	-2	2.84	10	21	2474	13.1	-0.9	-0.5	24.98	80	72.43
192	649258	5395344	0.09	2.7	-0.9	-2	3.3	13	45	3629	14.9	-0.9	-0.5	113.9	58	50.24
193	648586	5396170	0.05	1.2	1.98	-2	2.24	12	143	3464	24.3	3.25	1.58	61.8	42	26.04
194	647396	5396152	0.07	2.8	-0.9	-2	2.53	17	47	4947	24.2	-0.9	-0.5	74.07	61	49.14
195	650043	5396649	0.12	1.6	INF	-2	4.17	14	79	1784	26.1	INF	INF	175.57	66	62.27
196	649215	5397296	0.13	1.6	-0.9	-2	4.78	14	68	3162	25.0	-0.9	-0.5	147.93	56	52.71
197	648521	5397802	0.12	2.3	-0.9	-2	2.48	12	83	2008	12.8	1.3	0.77	92	64	61.61
198	647908	5397992	0.19	1.5	3.05	-2	5.83	17	81	5160	21.7	-0.9	0.77	136.21	89	48.19
199	652259	5397275	0.07	1.8	-0.9	-2	3.16	13	43	3457	13.3	-0.9	-0.5	122.03	43	44.87
200	652368	5398045	0.05	1.8	INF	-2	1.59	9	27	2420	8.6	INF	INF	29.88	64	71.51
201	651278	5395895	0.12	2.3	-0.9	-2	5.06	9	58	2492	9.7	-0.9	-0.5	131.45	55	55.61
202	652009	5396333	0.07	2.2	INF	-2	2.18	11	24	4899	7.0	INF	INF	163.36	43	70.33
203	652774	5395859	0.12	3.6	-0.9	-2	4.3	18	46	7430	11.4	-0.9	-0.5	174.95	72	59.39
204	653003	5394986	0.05	1.9	INF	-2	2.36	11	26	2667	9.5	INF	INF	84.15	42	56.29
205	652596	5393992	0.07	3.5	1.33	-2	1.5	10	38	4453	10.8	-0.9	-0.5	130.5	59	55.4
206	652459	5393040	0.09	3.2	INF	-2	1.85	28	50	3572	16.7	INF	INF	141.66	54	51.18
207	652006	5392073	0.14	6.3	-0.9	-2	5.4	30	69	12651	19.6	-0.9	0.52	145.62	72	52.73
208	651665	5394213	0.1	1.9	INF	-2	0.8	6	39	1351	6.9	INF	INF	131.48	27	33.5
209	651509	5391192	0.05	2.6	INF	-2	1.23	9	35	1818	10.1	INF	INF	48.04	45	56.57
210	634652	5385605	0.08	2.9	-0.9	-2	5.98	17	21	3903	18.3	-0.9	-0.5	287.51	54	53.6
211	639902	5390213	0.1	4.3	INF	-2	4.14	17	26	5609	11.8	INF	INF	172.53	55	44.37
212	642834	5393721	0.12	6.4	-0.9	-2	2.2	20	82	7816	16.1	-0.9	0.77	56.1	60	43.51
213	644932	5395890	0.08	4.8	-0.9	-2	4.84	27	29	18120	14.0	-0.9	-0.5	134.14	81	35.44
214	646654	5399312	0.08	2.9	INF	-2	3.6	17	62	3550	21.5	INF	INF	135.95	55	67.8
215	647493	5399821	0.1	2.2	INF	-2	5.02	13	62	7524	21.7	INF	INF	203.74	96	71.82
216	650427	5400876	0.06	2	INF	-2	2.92	13	38	9117	18.3	INF	INF	160.17	68	68.3
217	650775	5400890	0.09	3.4	INF	-2	1.42	8	49	4492	8.7	INF	INF	99.8	69	74.5
218	652772	5400517	0.04	4.2	INF	-2	1.39	8	33	5626	12.7	INF	INF	35.81	72	78.12
219	652331	5401451	0.05	3.7	-0.9	-2	3.16	15	24	6929	8.8	-0.9	-0.5	88.13	49	24.57
220	651983	5401933	0.08	2.4	-0.9	-2	2.42	14	29	6157	5.9	-0.9	-0.5	99.08	41	29.07
221	651899	5402351	0.08	4.3	-0.9	-2	2.17	10	24	5146	4.8	-0.9	-0.5	41.78	69	64.1
222	652566	5402387	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
223	653425	5402063	0.06	3.3	2.72	-2	2.18	15	31	8846	18.4	-0.9	-0.5	46.2	77	69.39
224	655928	5402176	0.16	6.6	INF	-2	1.84	11	67	3305	7.2	INF	INF	31.75	62	83.27
225	656851	5401938	0.11	4.9	INF	-2	3.21	27	63	9123	14.1	INF	INF	108.85	48	49.75
226	656566	5402557	0.13	8.9	INF	-2	3.61	39	71	13347	22.0	INF	INF	164.32	78	59.46
227	655943	5402845	0.25	4.7	1.51	-2	2.41	20	173	4048	13.9	-0.9	-0.5	317.64	38	43.54
228	655840	5404024	0.12	2.5	-0.9	-2	5.5	44	45	3924	77.2	1.09	0.8	92.16	56	57.52
229	657806	5402741	0.1	2.5	-0.9	-2	3.34	11	31	3262	9.8	-0.9	-0.5	62.42	66	70.57
230	657261	5403011	0.1	3.2	-0.9	-2	1.72	10	55	2123	8.5	-0.9	-0.5	124.26	41	50.11
231	658008	5403524	0.04	2	INF	-2	1.88	8	24	3440	10.9	INF	INF	51.5	39	72.27
232	657530	5404015	0.05	2	-0.9	-2	5.33	27	21	4218	19.9	-0.9	-0.5	157.14	52	61.59
233	657152	5404214	0.09	2.3	-0.9	-2	2.14	9	24	1834	7.9	-0.9	-0.5	113.91	41	58.26
234	658412	5404167	0.06	2.1	-0.9	-2	2.37	12	34	2304	10.6	-0.9	-0.5	65.47	53	68.12
235	657973	5405116	0.04	2.1	INF	-2	2.69	11	17	5194	7.0	INF	INF	72.76	42	38.53
236	659563	5404412	0.1	3	-0.9	-2	2.87	15	38	4726	12.8	-0.9	-0.5	96.85	54	46.29
237	660742	5405756	0.05	2	-0.9	-2	3.05	12	13	7920	5.4	-0.9	-0.5	62.74	39	23.58
238	660817	5406236	0.03	5.5	-0.9	-2	2.83	13	19	7690	8.3	-0.9	-0.5	53.46	36	38.42
239	660837	5407370	0.05	6.2	INF	-2	1.86	9	44	6244	9.9	INF	INF	58.43	68	81.64
240	658860	5407289	0.06	3.3	INF	-2	2.9	7	17	2317	11.3	INF	INF	61.31	44	68.41
241	658117	5408261	0.13	2.2	-0.9	-2	5.84	15	27	4143	11.7	-0.9	-0.5	122.55	61	58.06
242	657815	5408426	0.07	2.6	INF	-2	4.38	16	21	4635	10.0	INF	INF	132.1	64	66.16
243	657493	5408586	0.06	2.8	-0.9	-2	2.91	19	19	4819	10.7	-0.9	-0.5	50.19	85	47.81
244	658873	5408767	0.07	3.9	-0.9	-2	4.1	23	21	7813	12.3	-0.9	-0.5	58.64	101	44.89
245	658423	5409034	0.05	3.3	-0.9	-2	2.37	15	56	3837	8.3	-0.9	-0.5	39.68	61	44.38
246	658398	5409200	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
247	658101	5409186	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
248	658269	5409728	0.06	6.2	INF	-2	1.43	8	13	3149	7.5	INF	INF	18.5	79	61.76
249	657874	5409784	0.04	6.5	INF	-2	1.73	9	25	5034	7.0	INF	INF	21.2	89	56.25
250	658092	5410492	0.08	4	-0.9	-2	2.04	9	34	3343	7.4	-0.9	-0.5	59.8	69	59.58
251	659643	5409270	0.38	4.1	-0.9	-2	3.07	19	158	2814	11.5	-0.9	0.64	367.9	35	60.98
252	661868	5409401	0.06	4	INF	-2	2	10	13	2677	6.0	INF	INF	59.24	54	75.11

Site	Easting NAD 27 UTM Zone 16	Northing Method-----> Units-----> D. L.----->	Ag ICP-MS ppm 0.02	As INAA ppm 0.5	Au FA ppb 0.9	Au INAA ppb 2	Co ICP-MS ppm 0.05	Cr ICP-OES ppm 4	Cu ICP-OES ppm 5	Fe ICP-OES ppm 5	Ni ICP-MS ppm 0.5	Pd FA ppb 0.9	Pt FA ppb 0.5	Total REEs La to Lu	Zn ICP-OES ppm 2	LOI Grav. % 0.05
253	662251	5410038	0.05	4.5	INF	-2	1.85	9	18	2804	7.6	INF	INF	128.93	70	77.04
254	660546	5409941	0.06	4.3	-0.9	-2	2.5	13	36	3055	10.1	-0.9	-0.5	97.09	56	62.98
255	660175	5410082	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
256	660580	5411143	0.04	2.8	-0.9	-2	2.1	10	19	2380	11.5	-0.9	-0.5	63.57	27	63.93
257	660173	5412179	0.09	4.1	-0.9	-2	4.46	22	47	8192	11.9	-0.9	-0.5	101.04	64	38.91
258	658368	5411440	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
259	659972	5414591	0.04	2.2	INF	-2	1.16	6	8	1725	5.1	INF	INF	16.42	83	85.64
260	656720	5410725	0.11	2.7	-0.9	-2	2.43	18	65	5509	7.9	-0.9	-0.5	154.96	34	29.84
261	649501	5403788	0.09	2.9	-0.9	-2	4.96	10	26	3837	11.4	-0.9	-0.5	115.89	68	55.62
262	643053	5395907	0.05	1.5	-0.9	-2	3.43	10	32	1704	14.3	-0.9	-0.5	157.41	47	46.15
263	636722	5385535	0.13	3.1	-0.9	-2	7.11	27	61	7393	13.5	-0.9	-0.5	237.36	119	52.29
264	644269	5387205	0.06	1.6	-0.9	-2	4.04	20	14	11795	9.1	-0.9	-0.5	92.3	40	13.82
265	645536	5390240	0.03	1.5	-0.9	-2	4.2	17	11	9846	8.5	-0.9	-0.5	80.57	30	4.88
266	644568	5392985	0.06	2	-0.9	-2	2.13	9	25	1533	11.3	-0.9	-0.5	113.11	58	53.68
267	644008	5392998	0.08	2	-0.9	-2	1.41	9	28	1583	10.0	-0.9	-0.5	79.36	56	55.98
268	645475	5396876	0.06	1.5	INF	-2	1.42	11	47	3042	7.4	INF	INF	78.98	43	73.96
269	645633	5401152	0.02	1.4	-0.9	-2	2.44	12	19	9886	20.7	-0.9	-0.5	38.59	40	14.31
270	648554	5400798	0.16	5.2	-0.9	-2	6.87	21	36	13296	13.6	-0.9	-0.5	180.48	100	45.31
271	649641	5401121	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
272	649997	5401906	0.1	3	INF	-2	5.94	20	67	6093	24.2	INF	INF	191.22	94	65.77
273	650815	5402013	0.05	1.6	INF	-2	2.05	11	33	3924	13.6	INF	INF	113.14	58	77.59
274	650951	5403695	0.29	2.6	-0.9	-2	3.43	15	48	12635	9.5	-0.9	-0.5	373.47	74	60.92
275	652376	5404281	0.09	1.8	-0.9	-2	5.27	17	32	6907	12.2	-0.9	-0.5	132.32	67	46.39
276	655525	5404490	0.09	3.2	INF	-2	2.55	15	21	4642	10.0	INF	INF	73.12	58	61.48
277	655392	5405366	0.09	2.7	-0.9	-2	1.92	17	36	2282	10.7	-0.9	-0.5	198.47	50	66.63
278	655920	5405133	0.12	7.2	-0.9	-2	2.88	17	40	21084	7.8	-0.9	-0.5	153.97	66	51.74
279	655855	5405690	0.1	5.1	INF	-2	3.28	15	47	5978	12.1	INF	INF	82.44	68	81.34
280	656004	5406313	0.09	4.6	-0.9	-2	2.43	12	28	5524	7.5	-0.9	-0.5	78.08	62	60.62
281	654917	5406777	0.07	2.8	INF	-2	3.05	12	38	4480	9.1	INF	INF	75.89	62	66.04
282	653101	5407671	0.07	2.7	-0.9	-2	1.38	8	41	1760	7.8	-0.9	-0.5	93.21	48	63.85
283	654508	5408104	0.07	1.4	-0.9	-2	5.03	16	27	5348	11.6	-0.9	-0.5	145.71	58	73.37
284	655351	5407623	0.05	3.8	INF	-2	3.61	10	49	2207	11.5	INF	INF	63.44	65	82.95
285	656155	5407543	0.04	7.7	INF	-2	1.41	8	70	6819	8.1	INF	INF	24.72	54	75.91
286	656453	5407109	0.1	12	1.43	-2	3.39	12	134	4032	14.5	1.76	0.84	53.71	49	68.67
287	656842	5407503	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
288	656752	5407947	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
289	657324	5405968	0.05	2.8	-0.9	-2	2.37	8	18	2060	10.5	-0.9	-0.5	31.71	38	76.86
290	654186	5405612	0.06	2.1	-0.9	-2	1.94	6	28	1348	8.3	-0.9	-0.5	27.96	65	87.51
291	650264	5405720	0.1	2.7	-0.9	-2	1.61	7	57	1466	11.0	-0.9	-0.5	116.14	54	50.33
292	649279	5402524	0.1	2.1	-0.9	-2	3.42	7	24	2543	9.2	-0.9	-0.5	106.14	65	63.53
293	647842	5402078	0.08	1.6	-0.9	-2	4.18	9	40	3118	16.3	-0.9	-0.5	146.2	68	66.36
294	648162	5402539	0.06	1.5	-0.9	-2	3.53	7	27	3501	15.8	-0.9	-0.5	106.72	60	60.19
295	646979	5405092	0.14	2.4	-0.9	-2	5.43	30	74	10648	32.2	-0.9	0.98	152.63	77	32.47
296	647553	5406263	0.1	2.6	-0.9	-2	2.54	12	71	6135	16.0	-0.9	-0.5	127.68	54	42.64
297	647477	5407627	0.08	2.2	-0.9	-2	2.1	11	56	3798	13.6	-0.9	-0.5	99.94	45	40.23
298	650584	5410110	0.03	1.7	-0.9	-2	0.97	6	18	2029	7.9	-0.9	-0.5	14.89	39	38.02
299	651348	5412232	0.08	2.5	-0.9	-2	2.52	9	47	4901	9.9	-0.9	0.52	91.36	85	80.26
300	652868	5411764	0.03	1.4	-0.9	-2	3.36	16	17	8229	9.9	-0.9	-0.5	56.53	27	12.96
301	652855	5413583	0.06	4.1	-0.9	-2	8.49	30	18	25750	18.7	-0.9	-0.5	107.68	72	18.89
302	653329	5416027	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
303	651163	5416624	0.06	2.4	-0.9	-2	6.16	27	17	14704	18.2	-0.9	-0.5	85.56	53	23.83
304	649333	5417064	0.06	1.9	INF	-2	1.32	6	21	2208	4.9	INF	INF	46.43	43	78.76
305	649374	5418437	0.06	2.1	-0.9	-2	1.51	7	18	2252	7.6	-0.9	0.51	48.82	50	76.13
306	651602	5418142	0.04	4.5	-0.9	-2	4.43	15	19	7041	14.5	-0.9	-0.5	48.8	65	62.13
307	652566	5418774	0.05	5	-0.9	-2	3.61	13	31	8824	13.5	-0.9	-0.5	47.49	62	59.16
308	654322	5418274	0.04	3.6	-0.9	-2	2.91	15	13	4649	12.9	-0.9	-0.5	35.3	93	58.58
309	654469	5416913	0.04	4.3	16.61	-2	3.04	7	15	4745	10.0	-0.9	-0.5	15.33	103	83.12
310	655617	5415028	0.04	4.8	-0.9	-2	1.35	7	25	1552	8.9	-0.9	-0.5	33.61	53	67.62
311	636918	5389110	0.06	2.9	-0.9	-2	2.23	16	33	4475	14.6	-0.9	-0.5	210.33	42	31.34
312	642765	5392334	0.14	3.1	-0.9	-2	4.62	27	34	7780	16.1	-0.9	-0.5	179.57	68	47.06
313	646394	5397770	0.1	5.6	INF	-2	3.46	18	59	7697	17.4	INF	INF	65.85	65	50.38
314	646568	5400675	0.12	1.6	-0.9	-2	4.83	11	54	1912	29.9	-0.9	-0.5	173.84	64	51.88
315	655963	5411524	0.06	3.3	-0.9	-2	3.26	15	26	9848	9.0	-0.9	-0.5	80.07	48	45.21

Site	Easting NAD 27 UTM Zone 16	Northing Method-----> Units-----> D. L.----->	Ag ICP-MS ppm 0.02	As INAA ppm 0.5	Au FA ppb 0.9	Au INAA ppb 2	Co ICP-MS ppm 0.05	Cr ICP-OES ppm 4	Cu ICP-OES ppm 5	Fe ICP-OES ppm 5	Ni ICP-MS ppm 0.5	Pd FA ppb 0.9	Pt FA ppb 0.5	Total REEs La to Lu	Zn ICP-OES ppm 2	LOI Grav. % 0.05
316	655596	5412087	0.02	1.6	-0.9	-2	1.87	14	6	4830	7.7	-0.9	-0.5	36.17	43	20.46
317	656198	5412314	0.05	5	-0.9	-2	2.96	17	40	7310	14.8	-0.9	-0.5	86.63	51	50.85
318	656483	5412790	0.04	5.2	-0.9	-2	2.1	15	32	6940	12.1	-0.9	-0.5	70.07	50	50.31
319	658618	5414823	0.04	3.4	INF	-2	1.58	8	25	2973	7.1	INF	INF	32.83	111	77.79
320	659803	5416400	0.05	1.8	INF	-2	1.28	6	19	1602	10.5	INF	INF	39.92	46	73.42
321	657752	5419228	-0.02	4.7	INF	-2	1.39	7	6	3500	6.2	INF	INF	12.55	114	82.42
322	661189	5420016	0.03	INF	INF	INF	1.49	5	11	1780	8.8	INF	INF	15.29	62	86.1
323	659931	5420565	0.06	13	-0.9	-2	9.37	9	24	34284	12.3	-0.9	-0.5	21.33	327	79.4
324	660333	5420815	0.02	5.2	INF	-2	2.84	8	7	7911	9.5	INF	INF	20.71	94	75.91
325	659716	5421667	0.03	11	INF	-2	1.88	11	10	10564	7.6	INF	INF	28.74	39	74.27
326	659205	5421445	0.05	5.1	-0.9	-2	3.15	19	13	14222	10.7	-0.9	-0.5	41.04	62	72.01
327	658941	5422309	0.04	6.3	INF	-2	2	13	23	20025	10.1	INF	INF	23.64	58	74.88
328	659554	5422223	0.04	2.4	INF	-2	1.31	7	8	2843	5.8	INF	INF	20.25	51	76.75
329	660149	5422786	-0.02	5.1	INF	-2	1.19	7	7	7487	4.8	INF	INF	13.26	36	73.79
330	660770	5422531	0.03	2.4	-0.9	-2	1.42	9	6	2900	5.3	-0.9	-0.5	21.72	33	62.68
331	660654	5423603	0.04	3.8	-0.9	-2	1.68	14	6	4413	8.1	-0.9	-0.5	25.78	67	65.51
332	661356	5423615	-0.02	3.9	-0.9	-2	0.91	9	-5	35127	4.8	-0.9	-0.5	9.8	36	53.91
333	662474	5424236	0.03	3.6	-0.9	-2	4.61	25	14	18245	15.2	-0.9	-0.5	57.39	52	28.51
334	660306	5423520	0.02	4.1	-0.9	-2	2.06	15	5	11299	5.9	-0.9	-0.5	33.087	45	63.38
335	659713	5423197	0.04	1.9	INF	-2	1.24	10	7	2729	5.9	INF	INF	20.041	37	82.36
336	659344	5422988	0.06	6.8	INF	-2	1.97	15	33	18899	8.5	INF	INF	31.05	59	75.06
337	659085	5423578	0.04	4.6	-0.9	-2	3.22	18	18	21626	10.1	-0.9	-0.5	31.9	46	48.52
338	658753	5424008	-0.02	1.3	-0.9	-2	0.85	6	6	2906	5.5	-0.9	-0.5	2.925	10	12.53
339	658874	5424349	-0.02	2.2	-0.9	-2	0.74	8	7	5593	5.3	-0.9	-0.5	6.62	12	19
340	659311	5424301	-0.02	-0.5	-0.9	-2	1.71	10	-5	5477	6.4	-0.9	-0.5	26.98	20	8.38
341	659785	5424900	0.04	2.4	-0.9	-2	1.81	8	28	2587	10.1	-0.9	-0.5	23.2	73	79.12
342	659241	5425037	0.03	2.9	INF	-2	1.9	10	10	4033	7.7	INF	INF	23.69	49	77.05
343	659085	5425421	0.03	3.5	-0.9	-2	2.19	10	11	9992	8.1	-0.9	-0.5	21.03	30	22.27
344	659874	5425792	0.04	3.6	INF	-2	2.5	10	14	4374	8.3	INF	INF	29.58	61	70.11
345	662169	5427096	-0.02	0.7	-0.9	-2	0.48	5	-5	2511	4.7	-0.9	-0.5	3.495	11	16.37
346	662404	5427379	-0.02	3.1	-0.9	-2	0.8	5	-5	4850	5.4	-0.9	-0.5	7.615	16	21.78
347	662397	5427987	-0.02	20	-0.9	-2	0.4	4	-5	3660	4.2	-0.9	-0.5	3.13	11	18.61
348	662112	5428482	-0.02	14	INF	-2	0.8	5	5	5597	4.5	INF	INF	5.19	20	37.37
349	661687	5427841	0.05	5.2	INF	-2	4.25	21	16	8790	12.9	INF	INF	60.07	50	55.4
350	660697	5427387	0.08	INF	INF	INF	3.15	14	15	10292	9.3	INF	INF	40.38	84	63.75
351	659992	5426595	0.04	3.1	INF	-2	1.8	11	9	4962	7.7	INF	INF	25	52	78.45
352	659335	5426226	-0.02	2.6	-0.9	-2	0.9	6	-5	8133	4.9	-0.9	-0.5	4.02	19	19.75
353	658941	5426184	0.02	2	INF	-2	0.85	-4	5	3355	5.2	INF	INF	11.3	63	83.87
354	658806	5425528	-0.02	3.9	-0.9	-2	1.89	18	22	6503	11.0	-0.9	0.51	8.2	18	17.12
355	654792	5419415	-0.02	3.2	INF	-2	1.22	7	7	4371	7.9	INF	INF	11.52	51	87.39
356	653503	5410315	0.03	2.8	INF	-2	1.58	6	25	2449	7.5	INF	INF	34.44	70	80.27
357	644431	5397921	0.04	2.5	-0.9	-2	2.38	7	24	1889	10.4	-0.9	-0.5	41.92	73	66.98
358	631213	5388280	0.21	3.7	-0.9	-2	8.47	26	33	15891	14.4	-0.9	-0.5	522.39	111	31.39
359	635151	5393089	0.24	3.4	-0.9	-2	6.58	24	30	10846	11.3	-0.9	-0.5	432.71	74	41.3
360	638142	5399232	0.08	3.2	-0.9	-2	3.9	20	60	8160	17.7	-0.9	-0.5	78.27	57	32.67
361	646370	5401276	0.14	1.4	-0.9	-2	5.75	19	82	4314	37.4	-0.9	0.59	205.8	97	57.89
362	643888	5407000	-0.02	1.3	-0.9	-2	2.44	11	5	10020	11.0	-0.9	-0.5	35.63	29	4.6
363	645055	5412580	0.04	1.2	-0.9	-2	4.51	23	14	12983	15.1	-0.9	-0.5	83.42	37	7.55
364	655548	5419570	0.03	7.7	-0.9	-2	3.26	13	11	9406	6.9	-0.9	0.56	25.13	132	74.16
365	655442	5419833	-0.02	19	-0.9	-2	1.61	14	7	145549	4.6	-0.9	-0.5	22.6	104	54.8
366	655678	5420624	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
367	655626	5421309	0.04	5.6	INF	-2	3.88	16	5	15606	9.7	INF	INF	28.87	118	57.92
368	655428	5421493	0.04	INF	INF	INF	1.86	11	10	2580	6.7	INF	INF	19.03	114	84.16
369	655794	5422334	0.08	3.9	INF	-2	2.49	13	17	6082	8.1	INF	INF	37.01	117	70.53
370	656398	5422835	0.05	2.2	INF	-2	3.74	22	13	7819	13.4	INF	INF	51.38	68	57.92
371	656920	5422638	0.06	1.5	INF	-2	2.53	15	12	3613	8.2	INF	INF	33.24	93	72.28
372	657918	5423360	0.05	4.4	INF	-2	4.74	24	11	11678	14.0	INF	INF	61.86	53	40.28
373	656530	5423855	-0.02	4.7	-0.9	-2	0.8	5	-5	5117	5.0	-0.9	-0.5	4.72	22	49.53
374	656399	5424530	0.02	2.8	INF	-2	1.58	8	5	5235	5.2	INF	INF	17.73	53	68.28
375	657003	5424883	-0.02	3.1	-0.9	-2	1.37	13	9	22196	6.0	-0.9	-0.5	6.335	39	17.93
376	657492	5425839	-0.02	3.5	-0.9	-2	1.45	10	7	16910	5.5	-0.9	-0.5	5.46	30	21.92
377	657532	5427143	0.04	3.5	INF	-2	1.07	7	-5	2310	4.5	INF	INF	12.87	52	70.67
378	657876	5427851	0.03	INF	INF	INF	1.55	15	-5	3258	9.3	INF	INF	14.33	60	86.23

Site	Easting NAD 27 UTM Zone 16	Northing Method----> Units----> D. L.---->	Ag ICP-MS ppm 0.02	As INAA ppm 0.5	Au FA ppb 0.9	Au INAA ppb 2	Co ICP-MS ppm 0.05	Cr ICP-OES ppm 4	Cu ICP-OES ppm 5	Fe ICP-OES ppm 5	Ni ICP-MS ppm 0.5	Pd FA ppb 0.9	Pt FA ppb 0.5	Total REEs La to Lu	Zn ICP-OES ppm 2	LOI Grav. % 0.05
379	658608	5427988	-0.02	0.6	-0.9	-2	0.73	6	-5	1788	2.7	-0.9	-0.5	20.24	23	21.83
380	657479	5428890	-0.02	1.8	INF	-2	0.55	5	-5	3674	4.1	INF	INF	5.615	23	65.15
381	655937	5426351	-0.02	1.9	-0.9	-2	1.83	9	-5	8141	4.0	-0.9	-0.5	33.45	17	8.32
382	656194	5426546	0.04	4.3	INF	-2	2.26	15	7	12857	8.1	INF	INF	27.15	44	58.06
383	656392	5427069	0.06	8.7	INF	4	4.9	24	15	57990	9.7	INF	INF	51.51	93	59.82
384	656077	5425914	0.04	3.7	INF	-2	1.25	14	7	1990	6.3	INF	INF	12.54	52	77.82
385	656421	5425565	0.03	2.9	INF	-2	1.99	10	7	3148	7.3	INF	INF	30.91	75	56.54
386	655684	5423694	-0.02	0.6	-0.9	-2	1.08	13	-5	2178	5.6	-0.9	-0.5	24.74	12	31.72
387	655447	5424159	-0.02	2.7	-0.9	-2	0.95	5	5	3260	4.1	-0.9	-0.5	7.175	28	42.99
388	655547	5424571	0.04	3.2	INF	-2	0.96	7	7	2678	4.7	INF	INF	15.22	72	77.98
389	654918	5422762	0.05	3	INF	4	1.84	22	7	4288	11.8	INF	INF	30.75	53	77.86
390	653442	5422642	0.03	INF	INF	INF	2.3	10	6	3927	8.9	INF	INF	13.59	88	83.71
391	653721	5423528	0.05	6.1	INF	-2	1.97	13	10	3412	8.1	INF	INF	32.8	82	67.77
392	654589	5423480	0.03	4	INF	-2	2.22	11	9	4467	7.3	INF	INF	20.38	87	68.92
393	654920	5424336	0.04	3.1	INF	-2	1.27	9	7	2767	5.2	INF	INF	18.47	54	81.79
394	655180	5424863	0.05	3	-0.9	-2	2.43	18	11	4414	8.9	-0.9	-0.5	38.65	71	34.43
395	654586	5424997	0.04	2.2	-0.9	-2	4.64	16	11	5978	10.0	-0.9	-0.5	31.89	149	47.13
396	655239	5425655	0.03	3.3	INF	-2	1.07	10	7	2873	5.1	INF	INF	14.16	32	57.34
397	654937	5425855	0.04	11	-0.9	-2	3.14	25	13	88768	7.7	-0.9	-0.5	50.76	77	39.4
398	654562	5426618	-0.02	1.1	-0.9	-2	0.84	11	-5	2483	3.9	-0.9	-0.5	21	24	18.65
399	654088	5426791	0.04	3.2	INF	-2	1.21	10	9	4060	5.7	INF	INF	20.8	52	71.27
400	654781	5426900	0.03	INF	INF	INF	1.65	13	9	9509	8.1	INF	INF	19.95	47	78.92
401	654786	5427335	0.03	3.2	INF	-2	1.85	19	11	5493	11.9	INF	INF	34.07	48	67.8
402	654094	5427484	0.04	4.1	INF	-2	1.7	8	15	25183	8.4	INF	INF	18.61	114	82.5
403	652847	5428523	0.02	-0.5	-0.9	-2	1.95	13	-5	4193	6.5	-0.9	-0.5	40.2	28	16.55
404	652234	5427551	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
405	652683	5427596	0.03	1.8	INF	-2	0.94	7	6	2908	4.6	INF	INF	13.73	43	55.41
406	626405	5390741	0.14	2.3	-0.9	-2	6.3	25	52	8150	13.7	-0.9	-0.5	346.03	73	39.02
407	622961	5393200	0.14	3.7	-0.9	-2	6.72	24	53	9468	12.3	-0.9	-0.5	248.11	81	47.95
408	622637	5395927	0.07	2.2	17.07	-2	3.2	13	76	2780	11.6	-0.9	-0.5	76.71	48	58.05
409	622362	5397896	0.11	4	INF	-2	2.88	22	119	6303	20.7	INF	INF	88.52	75	61.9
410	622638	5403944	0.04	2	-0.9	-2	2.12	13	22	2323	12.6	-0.9	-0.5	125.62	46	50.09
411	623167	5409094	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
412	622207	5414096	0.04	2.8	INF	-2	2.82	15	31	6322	10.2	INF	INF	51.22	51	58
413	622125	5420622	0.06	2.2	INF	-2	2.04	12	36	2540	34.7	INF	INF	65.0	59	77.1
414	622368	5424689	0.03	2.1	-0.9	-2	3.36	15	15	6511	8.9	-0.9	-0.5	63.12	41	17.16
415	622207	5427885	0.07	2.4	-0.9	-2	6.22	31	40	13503	19.7	-0.9	-0.5	82.71	64	26.79
416	625221	5428725	0.04	3.3	-0.9	-2	2.22	13	41	5753	11.8	-0.9	-0.5	86.82	34	28.51
417	625825	5429272	0.1	2.9	-0.9	-2	4.58	19	52	5185	14.3	-0.9	-0.5	113.63	63	48.98
418	624755	5431160	0.08	2.2	-0.9	-2	1.88	9	34	1961	9.3	-0.9	-0.5	132.41	43	47.91
419	624596	5431730	0.12	3.4	INF	-2	4.61	21	34	9887	13.2	INF	INF	185.47	72	64.15
420	623537	5432687	0.05	2.2	-0.9	-2	2.8	12	27	4589	11.6	-0.9	-0.5	70.33	51	48.14
421	623143	5433684	0.05	2.1	-0.9	-2	2.07	16	42	4044	11.6	-0.9	-0.5	134.84	38	39.46
422	621787	5432912	0.04	2	-0.9	-2	3.08	21	17	8762	8.2	-0.9	-0.5	75.52	31	17.18
423	621782	5432474	0.06	3.5	-0.9	-2	5.09	26	30	16292	12.4	-0.9	-0.5	104.96	61	28.8
424	622316	5430433	0.07	2.5	-0.9	-2	4.22	21	35	7136	14.5	-0.9	-0.5	94.41	52	43.8
425	623633	5430024	0.08	4	-0.9	-2	3.25	19	47	6767	13.7	-0.9	-0.5	89.2	50	51.36
426	625060	5430443	0.07	5	-0.9	-2	2.63	20	50	7444	13.6	-0.9	-0.5	117.4	56	57.64
427	625834	5431273	0.09	2.9	-0.9	-2	4.35	28	41	10991	13.6	-0.9	-0.5	124.17	69	35.02
428	626000	5432298	0.06	1.9	-0.9	-2	2.5	11	20	2677	9.7	-0.9	-0.5	107.6	56	56.42
429	626805	5433810	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
430	627203	5434852	0.08	2.2	INF	-2	1.76	10	32	2128	6.4	INF	INF	149.61	41	56.55
431	627913	5436754	0.06	2.6	INF	-2	2.07	12	30	4562	13.8	INF	INF	156.06	54	57.62
432	628949	5437497	0.08	2	INF	-2	2.21	17	46	3107	12.4	INF	INF	213.67	69	63.77
433	627297	5436955	0.07	2.5	-0.9	-2	3.75	18	38	5905	14.2	-0.9	-0.5	109.16	51	52.14
434	626073	5435734	0.04	1.7	-0.9	-2	2.39	11	22	2564	11.0	-0.9	-0.5	71.05	42	57.25
435	625352	5435083	0.07	1.3	-0.9	-2	2.96	17	27	7366	7.5	-0.9	-0.5	154.61	33	12.05
436	625120	5434410	0.06	1	-0.9	-2	1.39	11	67	3034	7.9	-0.9	-0.5	145.04	19	14
437	624994	5433853	0.06	2.2	-0.9	-2	3.22	18	33	5193	11.1	-0.9	-0.5	98.5	41	40.94
438	626266	5432969	0.03	1.6	-0.9	7	2.77	10	12	3155	8.9	-0.9	-0.5	41.67	61	63.99
439	627243	5431482	0.07	3	-0.9	-2	4.66	23	31	10169	12.6	-0.9	-0.5	103.39	74	38.8
440	628191	5432500	0.1	3.1	-0.9	-2	4.32	26	36	8619	12.6	-0.9	-0.5	106.4	72	38.44
441	627648	5433104	0.07	5	2.46	-2	2.98	18	61	6885	11.2	-0.9	-0.5	87.91	61	62.49

Site	Easting NAD 27 UTM Zone 16	Northing Method——> Units——> D. L.——>	Ag ICP-MS ppm 0.02	As INAA ppm 0.5	Au FA ppb 0.9	Au INAA ppb 2	Co ICP-MS ppm 0.05	Cr ICP-OES ppm 4	Cu ICP-OES ppm 5	Fe ICP-OES ppm 5	Ni ICP-MS ppm 0.5	Pd FA ppb 0.9	Pt FA ppb 0.5	Total REEs La to Lu	Zn ICP-OES ppm 2	LOI Grav. % 0.05
442	628041	5434228	0.1	5.1	INF	-2	3.63	20	60	11377	10.8	INF	INF	79.74	64	64.11
443	628702	5433423	0.06	2.5	INF	-2	3.44	14	47	8284	14.3	INF	INF	62.13	45	50.45
444	629161	5434788	0.05	3.6	INF	-2	2.12	13	51	6352	18.4	INF	INF	62	47	61.45
445	629774	5435269	0.08	2.9	-0.9	-2	4.91	21	49	7616	14.1	-0.9	-0.5	93.12	77	46.56
446	629945	5435751	0.05	3.1	INF	-2	1.5	12	57	3739	9.7	INF	INF	36.22	107	75.46
447	630215	5436394	0.04	3.9	INF	-2	1.53	7	95	2049	15.4	INF	INF	44.73	74	73.77
448	629889	5436872	0.05	2	INF	-2	2.02	14	24	1997	11.1	INF	INF	49.39	88	79.61
449	631090	5437668	0.04	INF	INF	INF	1.2	7	39	1710	5.4	INF	INF	20.47	69	82.59
450	630682	5436995	0.06	2.2	INF	-2	1.44	10	21	1787	7.8	INF	INF	48.02	64	73.13
451	630748	5436178	0.04	6.8	INF	-2	2.31	13	36	5874	12.9	INF	INF	90.43	88	83.74
452	631892	5435970	0.05	4.6	INF	-2	2.6	30	50	9918	21.3	INF	INF	73.3	59	54.54
453	632842	5436717	0.05	3.6	INF	-2	1.02	6	50	1110	6.6	INF	INF	34.09	101	88.22
454	631420	5435341	0.03	2.9	-0.9	-2	1.29	11	22	5722	8.6	-0.9	-0.5	35.94	30	73.81
455	630064	5434193	0.04	2	INF	-2	2.36	9	35	6397	9.6	INF	INF	32.92	57	74.45
456	630431	5433826	0.07	2.9	-0.9	-2	3.8	20	28	7962	10.1	-0.9	-0.5	92.36	60	49.71
457	627839	5427032	0.07	2.1	-0.9	-2	3.99	20	26	7592	11.2	-0.9	-0.5	61.3	54	40.29
458	625529	5419583	0.05	3	INF	-2	3.9	12	96	1563	19.3	INF	INF	38.1	70	81.93
459	626246	5406585	0.04	3.2	-0.9	-2	1.88	13	43	4168	12.0	-0.9	-0.5	84.55	44	48.51
460	632643	5384849	0.14	2.4	-0.9	-2	4.15	18	29	5667	12.3	-0.9	-0.5	295.19	49	37.65
461	637496	5383723	0.11	2.5	INF	-2	5.1	21	28	4655	13.5	INF	INF	238.76	60	69.32
462	638040	5384806	0.14	1.9	-0.9	-2	9.03	31	33	19891	14.8	-0.9	-0.5	357.38	107	42.76
463	639886	5384800	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
464	639581	5385229	0.11	4.1	-0.9	-2	4.11	22	48	10106	15.3	-0.9	-0.5	203.43	59	45.38
465	640008	5386140	0.1	3.2	-0.9	-2	3.17	24	42	6298	15.3	-0.9	-0.5	206.21	47	46.49
466	641128	5386712	0.17	5.2	-0.9	-2	4.88	22	55	8507	12.6	-0.9	-0.5	206.45	75	49.99
467	641678	5387976	0.18	4.1	-0.9	-2	5.67	29	65	9237	13.6	-0.9	-0.5	208.09	86	39.78
468	641500	5388443	0.23	2	-0.9	-2	2.42	18	30	4778	13.8	-0.9	-0.5	178.21	83	60.09
469	642038	5388965	0.17	7	-0.9	-2	4.89	25	69	14808	12.3	-0.9	-0.5	181.91	77	37.52
470	642420	5388625	0.08	4.6	-0.9	-2	2.36	22	70	4081	15.5	-0.9	-0.5	232.11	61	41.28
471	641769	5389462	0.06	2.8	-0.9	-2	3.43	18	15	8398	7.6	-0.9	-0.5	161.39	61	33.07
472	642136	5389476	0.06	-0.5	INF	-2	1.24	15	17	1919	9.5	INF	INF	16.97	99	87.5
473	642342	5389711	0.06	1.8	-0.9	-2	3.54	15	27	5476	11.0	-0.9	-0.5	160.21	53	36.01
474	642662	5390196	0.08	1.7	-0.9	-2	3.56	17	37	4415	12.3	-0.9	-0.5	216.08	54	45.3
475	643556	5390369	0.07	2	INF	-2	3.08	13	40	3681	10.9	INF	INF	194.97	48	64.13
476	642966	5390795	0.1	3	-0.9	-2	5.47	16	51	3712	11.1	-0.9	-0.5	228.65	57	44.65
477	642087	5391587	0.12	1.8	INF	-2	2.31	22	79	4129	14.0	INF	INF	184.69	34	42.68
478	643182	5391606	0.12	4.9	-0.9	-2	6.81	17	28	5888	18.4	-0.9	-0.5	173.52	83	60.81
479	644055	5391485	0.06	3	INF	-2	4.09	22	29	6263	12.9	INF	INF	119.67	55	65.08
480	643901	5391099	0.05	1.9	-0.9	-2	2.54	11	18	2645	8.7	-0.9	-0.5	116.39	51	54.19
481	645026	5391521	0.11	3	-0.9	-2	7.56	22	31	9108	15.0	-0.9	-0.5	273.39	70	52.07
482	644843	5392329	0.08	2.2	-0.9	-2	6.02	16	36	4363	14.4	-0.9	-0.5	225.12	64	47.92
483	644675	5391772	0.06	2	-0.9	-2	4.81	12	19	2810	11.3	-0.9	-0.5	88.08	63	47.9
484	645271	5393419	0.06	2.1	-0.9	-2	3.33	11	21	2447	13.7	-0.9	-0.5	113.08	52	52.05
485	645960	5395124	0.05	4	INF	-2	2.42	25	46	10993	22.8	INF	INF	91.82	57	60.08
486	646452	5394045	0.06	4	-0.9	-2	3	17	28	8486	13.6	-0.9	-0.5	103.69	62	50.27
487	647261	5393191	-0.02	2.1	-0.9	4	3.7	13	9	6535	7.4	-0.9	-0.5	64.1	51	14.51
488	647076	5391717	0.08	3.1	-0.9	-2	4.94	12	26	3330	13.0	-0.9	-0.5	152.79	59	56.79
489	645942	5388560	0.08	2	-0.9	-2	1.77	10	34	2240	7.3	-0.9	-0.5	144.33	47	48.91
490	646209	5386959	0.08	2.4	-0.9	5	2.89	10	31	1527	6.3	-0.9	-0.5	245.09	38	39.6
491	646276	5385558	0.04	1.8	-0.9	-2	2.24	8	15	2161	9.5	-0.9	-0.5	99.6	20	67.85
492	644728	5386032	-0.02	1.4	-0.9	-2	1.9	13	45	6051	11.6	-0.9	-0.5	46.97	23	10.65
493	643644	5386226	0.06	2.2	-0.9	-2	4.83	25	14	14363	10.4	-0.9	-0.5	112.16	45	11.92
494	644182	5385126	0.08	1.3	-0.9	-2	4.57	14	31	2462	11.3	-0.9	-0.5	204.47	37	36.14
495	644809	5384258	0.09	5.2	-0.9	-2	5.46	22	19	11159	10.3	-0.9	-0.5	258.72	86	51.35
496	643622	5384240	0.09	1.9	-0.9	-2	1.74	10	20	4444	5.7	-0.9	-0.5	241.8	23	56.69
497	642122	5385587	0.14	4	-0.9	-2	8.13	33	33	25522	13.8	-0.9	-0.5	223.24	105	26.56
498	641281	5384057	0.16	2.6	-0.9	-2	5.31	26	40	9525	14.3	-0.9	-0.5	232.24	77	38.03
499	639308	5383400	0.1	4	0.95	-2	4.59	27	31	8869	13.5	-0.9	-0.5	129.93	87	30.78
500	639603	5384128	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
501	638935	5385261	0.13	3.2	-0.9	-2	4.82	17	35	8150	13.4	-0.9	-0.5	269.12	56	43.78
502	638969	5384778	0.09	2.3	-0.9	-2	5.53	15	27	4590	14.1	-0.9	-0.5	191.34	54	52.08
503	637351	5385688	0.17	-0.5	-0.9	-2	7.16	17	42	5834	14.2	-0.9	-0.5	223.62	68	45.02
504	637987	5387918	0.11	1.2	-0.9	-2	3.88	13	24	3556	18.3	-0.9	-0.5	178.64	55	61.31

Site	Easting	Northing	Ag	As	Au	Au	Co	Cr	Cu	Fe	Ni	Pd	Pt	Total	Zn	LOI
	NAD 27	Method---->	ICP-MS	INAA	FA	INAA	ICP-MS	ICP-OES	ICP-OES	ICP-OES	ICP-MS	FA	FA	REEs	ICP-OES	Grav.
	UTM Zone 16	Units------->	ppm	ppm	ppb	ppb	ppm	ppm	ppm	ppm	ppm	ppb	ppb	La to Lu	ppm	%
		D. L.------->	0.02	0.5	0.9	2	0.05	4	5	5	0.5	0.9	0.5		2	0.05
505	639576	5387585	0.12	2.2	-0.9	-2	5.79	17	22	3828	17.7	-0.9	-0.5	437.63	52	42.68
506	640813	5389382	0.18	2.9	-0.9	-2	6.23	19	27	11676	8.7	-0.9	-0.5	495.68	47	73.79
507	640209	5389236	0.09	-0.5	-0.9	-2	3.63	12	24	2448	11.0	-0.9	-0.5	233.62	54	51.39
508	639575	5388925	0.09	2.2	-0.9	-2	2.78	10	21	2045	13.2	-0.9	-0.5	230.25	50	47.44
509	638678	5389746	0.2	2.7	-0.9	-2	12.32	27	35	17775	18.0	-0.9	-0.5	271.23	94	57.16
510	639334	5391401	0.09	1.6	-0.9	-2	3.62	11	25	2685	9.9	-0.9	-0.5	197.36	43	52.91
511	639106	5390905	0.14	2.8	-0.9	-2	6.07	23	36	8687	14.0	-0.9	-0.5	231.9	69	39.46
512	640050	5391410	0.11	3.2	INF	-2	5	18	37	5352	12.2	INF	INF	275.45	54	58.76
513	634328	5391323	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
514	639452	5392945	0.11	2.7	-0.9	-2	4.18	20	44	5858	16.2	-0.9	-0.5	217.76	54	46.91
515	643614	5396783	0.1	2.8	-0.9	-2	5.74	22	31	9361	12.1	-0.9	-0.5	152.71	85	41.08
516	646030	5398712	0.1	7.1	-0.9	-2	3.61	21	75	8153	27.9	1.22	0.92	58.91	58	55.01
517	646347	5405263	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
518	646278	5408975	0.06	1.5	INF	-2	2.06	7	28	2018	8.3	INF	INF	78.09	45	70.45
519	645167	5413586	0.03	1.7	-0.9	-2	3.04	20	30	9605	27.4	-0.9	-0.5	67.17	32	17.56
520	646420	5417876	-0.02	1	-0.9	-2	1.69	8	8	3130	5.9	-0.9	-0.5	30.0	19	12.61
521	645809	5422891	0.06	1	-0.9	-2	4.1	15	24	6104	10.2	-0.9	-0.5	86.89	45	36.22
522	647689	5423592	-0.02	3.8	-0.9	-2	2.08	7	13	6182	10.0	-0.9	-0.5	16.77	77	39.98
523	648337	5422593	0.04	4.4	INF	-2	1.54	8	27	2026	11.7	INF	INF	35.6	67	79.91
524	648042	5421400	0.03	3.1	INF	-2	1.55	6	25	4115	14.4	INF	INF	30.97	60	79.16
525	649125	5421415	0.06	3.1	INF	-2	2.77	10	58	3837	17.6	INF	INF	58.77	51	65.17
526	650548	5422611	0.04	INF	INF	INF	1.61	8	18	2413	6.2	INF	INF	24.13	64	83.73
527	652086	5423977	0.03	6	INF	-2	1.36	6	5	10779	4.3	INF	INF	11.26	63	78.58
528	652142	5423269	-0.02	7.2	INF	-2	1.65	-4	-5	5428	3.3	INF	INF	5.095	58	92.33
529	653465	5425672	-0.02	10	-0.9	-2	2.06	11	6	5682	6.6	-0.9	-0.5	32.25	38	29.92
530	652320	5425997	-0.02	6.1	INF	-2	2.45	4	6	4151	6.0	INF	INF	12.7	160	89.57
531	651809	5425834	0.02	7.2	INF	-2	3.21	13	9	6079	10.6	INF	INF	31.08	155	74.1
532	651751	5426784	0.06	INF	INF	INF	2.08	10	15	2855	8.4	INF	INF	24.6	83	71.94
533	653160	5429575	-0.02	1.8	1.18	-2	2.72	11	9	5023	8.0	-0.9	-0.5	35.14	52	50.51
534	655624	5433072	0.05	4.2	INF	-2	2.66	9	32	4472	11.0	INF	INF	41.84	83	73.25
535	657886	5434579	-0.02	5.2	-0.9	-2	1.52	10	5	7553	6.3	-0.9	-0.5	22.68	40	35.38
536	657773	5433449	-0.02	7.1	INF	-2	1.33	10	7	11189	5.7	INF	INF	18.81	38	70.68
537	658083	5432601	0.05	7.7	INF	-2	3.4	17	15	18505	10.4	INF	INF	39.64	64	52.88
538	658919	5431866	0.02	2.7	INF	-2	0.74	6	6	5605	6.9	INF	INF	8.485	34	48.05
539	659110	5431723	0.04	2.7	-0.9	-2	3.4	18	10	8507	9.2	-0.9	-0.5	41.2	44	44.73
540	658792	5431274	-0.02	1.1	-0.9	-2	1.73	11	-5	3941	5.4	-0.9	-0.5	27.3	22	24.05
541	657801	5430374	0.04	8.3	INF	-2	3.16	11	12	22925	6.9	INF	INF	18.88	69	69.54
542	658734	5430078	0.02	4.7	-0.9	-2	2.69	14	9	9802	8.6	-0.9	-0.5	41.66	38	34.95
543	659670	5430617	-0.02	1.3	-0.9	-2	0.84	6	6	2897	4.5	-0.9	-0.5	4.715	12	9.01
544	660047	5432229	0.03	3.6	INF	-2	1.53	9	10	3092	7.6	INF	INF	18.68	88	77.77
545	659598	5432510	0.04	3.3	INF	-2	3.31	14	12	8865	8.5	INF	INF	42.25	63	66.31
546	659323	5432413	0.04	2.3	INF	-2	1.31	13	8	2828	8.0	INF	INF	14.49	76	89.66
547	659082	5433406	-0.02	5.1	-0.9	-2	1.18	7	6	9793	4.3	-0.9	-0.5	7.875	20	32.14
548	659916	5433282	0.05	15	INF	-2	2.62	13	18	12393	8.6	INF	INF	25.65	61	68.03
549	659997	5433156	0.04	2.5	INF	-2	1.91	11	11	3603	6.6	INF	INF	24.27	64	77.64
550	660765	5432847	0.05	3.6	INF	-2	2.89	20	28	6388	12.9	INF	INF	45.88	66	68.6
551	660287	5433846	0.02	5.8	-0.9	-2	2.17	11	11	23767	6.2	-0.9	-0.5	17.84	32	39.5
552	660556	5433759	0.06	4.5	INF	-2	3.68	23	21	8318	14.2	INF	INF	54.18	58	57.08
553	660728	5434341	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
554	661213	5434491	0.06	2.2	-0.9	-2	4.05	22	17	8779	11.9	-0.9	-0.5	70.38	66	33.28
555	660191	5434976	-0.02	2.9	INF	-2	1.53	14	8	9446	8.1	INF	INF	22.2	30	63.12
556	660076	5435594	-0.02	1.7	-0.9	-2	1.78	12	8	4914	7.1	-0.9	-0.5	24.36	15	3.63
557	660874	5435786	0.04	INF	INF	INF	0.95	8	9	1594	5.6	INF	INF	12.82	104	91.8
558	660963	5435436	0.03	2	INF	-2	2.62	18	11	4228	9.5	INF	INF	48.12	49	53.53
559	661639	5435504	0.04	4.1	INF	-2	1.84	14	28	4734	12.0	INF	INF	36.97	54	64.28
560	660770	5436839	0.02	1.9	INF	-2	2.34	10	10	3091	6.6	INF	INF	24.32	155	76.34
561	660489	5436928	0.06	INF	INF	INF	2.28	19	9	3896	10.4	INF	INF	31.07	46	68.38
562	658426	5436230	0.04	7.2	INF	-2	2.67	13	16	17181	6.9	INF	INF	33.03	56	59.88
563	658296	5436932	0.03	7.6	INF	-2	2.17	17	13	7671	12.0	INF	INF	30.82	101	68.34
564	657612	5437348	0.04	5.3	INF	-2	1.59	9	14	5631	7.2	INF	INF	27.88	74	63.31
565	657943	5437834	0.02	4.6	INF	-2	2.43	12	13	7534	9.8	INF	INF	28.3	66	45.93
566	659248	5437521	0.05	6.3	INF	-2	3.18	11	15	9268	9.4	INF	INF	35.36	108	70.61
567	659644	5438678	0.05	3.7	INF	-2	1.21	6	14	3988	5.8	INF	INF	16.77	58	81.36

Site	Easting	Northing	Ag	As	Au	Au	Co	Cr	Cu	Fe	Ni	Pd	Pt	Total	Zn	LOI
	NAD 27	Method------->	ICP-MS	INAA	FA	INAA	ICP-MS	ICP-OES	ICP-OES	ICP-OES	ICP-MS	FA	FA	REEs	ICP-OES	Grav.
	UTM Zone 16	Units-------->	ppm	ppm	ppb	ppb	ppm	ppm	ppm	ppm	ppm	ppb	ppb	La to Lu	ppm	%
		D. L.-------->	0.02	0.5	0.9	2	0.05	4	5	5	0.5	0.9	0.5		2	0.05
568	657110	5446751	0.06	3.3	-0.9	-2	5.42	25	17	19643	14.5	-0.9	-0.5	65.61	66	25.26
569	657188	5446063	0.05	10	INF	-2	3.1	22	31	17815	14.6	INF	INF	50.03	104	69.16
570	657683	5446156	0.04	3.3	-0.9	-2	3.24	17	16	8722	13.8	-0.9	-0.5	47.55	50	46
571	658823	5445839	0.04	4.9	INF	-2	2.47	21	31	6828	18.0	INF	INF	40.11	73	61.26
572	658236	5445724	0.02	3.6	-0.9	3	2.68	13	18	7720	14.8	-0.9	-0.5	37.51	51	40.37
573	657913	5445433	0.05	5.8	INF	-2	3.01	18	25	8524	16.6	INF	INF	45.71	73	55.55
574	658212	5444851	0.04	INF	INF	INF	1.71	9	12	2844	7.0	INF	INF	21.68	63	83.85
575	658171	5442027	0.06	4.3	-0.9	-2	4.8	26	33	44501	14.7	-0.9	-0.5	69.67	75	34.95
576	659385	5439478	0.02	1.9	INF	-2	1.72	12	8	2922	8.0	INF	INF	26.47	83	63.49
577	658624	5438597	0.03	4.9	INF	-2	1.92	11	11	6913	10.7	INF	INF	25.48	61	70.21
578	656928	5441722	0.03	2.5	-0.9	-2	3.78	18	10	8797	10.6	-0.9	-0.5	52.53	51	31.61
579	656897	5441234	0.03	3.1	-0.9	-2	3.78	19	16	8781	15.0	-0.9	-0.5	45.28	59	35.78
580	656326	5442285	0.04	16	INF	-2	3.13	14	26	6681	12.7	INF	INF	44.82	65	75.62
581	657615	5444056	0.04	2.9	INF	-2	0.98	5	14	1764	9.6	INF	INF	15.39	65	82.02
582	657215	5444612	0.04	6.3	INF	-2	3.3	18	14	19638	11.8	INF	INF	33.33	55	58.28
583	656553	5443710	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
584	656395	5444387	0.04	2.3	INF	-2	1.73	8	14	2747	6.1	INF	INF	20.87	88	73.86
585	656338	5444605	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
586	656089	5444099	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
587	655720	5443400	-0.02	2.8	INF	-2	2.08	16	11	6450	11.6	INF	INF	35.95	55	47.5
588	655216	5443256	0.04	3.7	INF	-2	2.43	13	10	10025	9.4	INF	INF	33.64	44	48.19
589	655943	5442929	0.03	4	INF	-2	1.11	5	11	1191	6.5	INF	INF	11.97	68	88.35
590	655475	5442524	0.06	3.6	INF	-2	4.44	25	19	7948	16.4	INF	INF	53.06	78	57.97
591	654629	5442412	-0.02	4	-0.9	-2	2.88	14	14	7840	9.3	-0.9	-0.5	40.1	30	13.36
592	654452	5441743	0.05	6.4	-0.9	-2	5.43	24	27	57564	13.4	-0.9	-0.5	60.06	65	34.92
593	656279	5446879	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
594	655415	5445904	0.05	3.4	INF	-2	3.09	16	27	8001	12.9	INF	INF	43.23	65	66.86
595	654620	5445489	0.05	3.6	-0.9	-2	4.06	23	23	10579	18.2	-0.9	-0.5	65.46	70	45.24
596	654575	5445193	0.04	3.9	-0.9	-2	4.37	20	14	13047	10.5	-0.9	-0.5	58.64	67	37.32
597	653305	5445017	0.04	3.3	INF	-2	2.91	15	29	8838	14.8	INF	INF	57.93	66	63.98
598	653578	5444021	0.04	3.5	INF	-2	2.11	7	24	2878	13.0	INF	INF	26.42	51	86.66
599	654033	5440999	0.04	2	INF	-2	4.18	27	14	8445	16.7	INF	INF	47.73	44	52.5
600	653594	5440773	0.04	2.4	-0.9	-2	2.31	13	9	14556	7.3	-0.9	-0.5	28.76	33	32.1
601	654337	5439991	0.07	2.9	INF	-2	3.09	17	17	5486	12.1	INF	INF	35.49	66	73.67
602	654410	5439493	0.06	2	INF	-2	3.54	15	18	5377	11.3	INF	INF	42.42	85	72.22
603	655014	5439503	0.03	2.1	-0.9	-2	4.69	22	11	10209	13.8	-0.9	-0.5	63.49	39	15.32
604	654359	5438870	0.04	4.6	INF	-2	1.78	7	26	4109	7.5	INF	INF	24.78	88	78.95
605	653710	5439561	0.04	4.3	-0.9	-2	2.37	39	63	10959	54.0	1.63	1.38	15.86	81	21.62
606	653227	5439482	-0.02	2.4	-0.9	-2	3.14	16	11	9372	10.4	-0.9	-0.5	45.2	42	26.92
607	652604	5439109	-0.02	4.7	-0.9	-2	2.51	16	10	9655	9.7	-0.9	-0.5	28.08	26	20.93
608	653011	5438480	0.04	2.6	-0.9	-2	4.69	20	9	14031	10.2	-0.9	-0.5	62.72	38	11.04
609	652441	5438280	0.05	2.7	-0.9	-2	5.35	24	17	12696	15.5	-0.9	-0.5	55.66	54	27.96
610	651395	5438037	-0.02	3	-0.9	-2	1.28	7	16	2648	10.2	-0.9	-0.5	12.02	33	37.88
611	651188	5437453	0.03	INF	INF	INF	2.28	10	11	4963	8.0	INF	INF	28.6	52	79.26
612	651721	5436895	-0.02	5.2	-0.9	-2	0.93	11	8	180015	2.5	-0.9	-0.5	2.585	32	20.93
613	652901	5437620	-0.02	1.6	-0.9	-2	1.34	9	7	4849	5.5	-0.9	-0.5	14.73	15	16.26
614	652322	5437303	-0.02	4.9	-0.9	-2	2.1	14	17	77065	5.6	-0.9	-0.5	11.55	30	24.81
615	653064	5437056	0.03	3.2	-0.9	-2	3.98	20	10	11034	11.2	-0.9	-0.5	60.89	38	17.95
616	653550	5435279	-0.02	2.4	-0.9	-2	1.1	6	59	3340	8.5	-0.9	-0.5	9.9	34	22.12
617	652026	5435891	0.05	INF	INF	INF	2.4	24	53	3196	13.0	INF	INF	31.01	68	67.28
618	651941	5434134	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
619	647657	5431415	0.04	3.9	INF	-2	1.36	13	7	3011	7.2	INF	INF	23.15	67	74.43
620	647939	5431314	0.04	3.4	INF	-2	1.28	8	10	5963	4.5	INF	INF	18.28	42	73.68
621	648023	5430833	0.05	INF	INF	INF	1.96	13	9	2940	8.6	INF	INF	17.36	80	81.23
622	647802	5430290	0.03	4.6	INF	-2	1.57	7	8	1986	7.5	INF	INF	16.52	54	85.8
623	635653	5389201	-0.02	1.3	-0.9	-2	1.51	8	15	4405	8.2	-0.9	-0.5	36.67	17	9.14
624	641844	5392210	0.05	2.9	-0.9	-2	1.48	10	33	4785	6.8	-0.9	-0.5	59.56	27	29.32
625	646139	5397902	0.14	13	-0.9	-2	4.78	23	81	26708	20.0	1.36	1.02	112.56	72	40.87
626	646774	5403043	0.11	2.8	INF	-2	7.76	13	58	4239	21.1	INF	INF	235.65	59	69.56
627	645146	5408069	0.12	2	-0.9	-2	5.03	11	102	4462	34.3	1.18	0.61	79.64	52	53.01
628	645781	5414029	0.04	2.2	-0.9	-2	3.03	12	26	6979	16.7	-0.9	-0.5	60.05	37	28.79
629	645043	5415952	0.04	5.3	INF	-2	4.6	14	42	6970	11.8	INF	INF	41.92	51	57.76
630	643294	5418270	0.03	3.7	INF	-2	5.26	11	19	4451	17.4	INF	INF	34.45	39	71.82

Site	Easting NAD 27 UTM Zone 16	Northing Method——> Units——> D. L.——>	Ag ICP-MS ppm 0.02	As INAA ppm 0.5	Au FA ppb 0.9	Au INAA ppb 2	Co ICP-MS ppm 0.05	Cr ICP-OES ppm 4	Cu ICP-OES ppm 5	Fe ICP-OES ppm 5	Ni ICP-MS ppm 0.5	Pd FA ppb 0.9	Pt FA ppb 0.5	Total REEs La to Lu	Zn ICP-OES ppm 2	LOI Grav. % 0.05
631	639884	5421985	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
632	641978	5424253	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
633	643949	5424840	-0.02	1.8	INF	-2	2.65	7	16	2307	9.5	INF	INF	19.23	54	84.75
634	644139	5425776	0.11	2.2	-0.9	-2	4.74	18	34	7560	15.4	-0.9	-0.5	129.13	70	55.41
635	644589	5427106	0.03	2.9	INF	-2	1.56	6	23	1211	15.3	INF	INF	20.49	53	84.72
636	644869	5425168	0.08	3.1	INF	-2	5.06	14	48	4234	17.1	INF	INF	122.38	65	60.16
637	645844	5423980	0.1	3.1	INF	-2	2.38	10	107	1840	16.5	INF	INF	164.3	40	73.72
638	646450	5424333	0.05	2.4	-0.9	-2	4.07	13	23	5714	9.7	-0.9	-0.5	95.8	60	45.5
639	647460	5424993	0.07	2.7	-0.9	-2	4.56	11	37	2094	10.9	-0.9	-0.5	142.26	50	63.42
640	647173	5425253	0.04	1.9	-0.9	-2	3.6	12	14	4646	9.3	-0.9	-0.5	74.23	54	44.26
641	648208	5426269	0.06	2.1	INF	-2	1.9	10	23	2464	8.7	INF	INF	57.9	45	74.78
642	648769	5426028	0.05	1.5	-0.9	-2	2.65	6	61	1635	8.4	-0.9	-0.5	52.41	53	64.79
643	649540	5426324	0.04	3.9	INF	-2	3.17	12	56	5203	15.4	INF	INF	53.62	64	67.03
644	650107	5426762	-0.02	1.3	-0.9	-2	2.75	17	12	5680	9.9	-0.9	-0.5	44.07	52	27.97
645	648864	5426779	0.04	1.8	-0.9	-2	3.73	12	35	3026	12.0	-0.9	-0.5	47.6	50	63.51
646	647397	5427329	0.03	3.2	INF	-2	1.91	8	28	2946	14.4	INF	INF	38.72	54	79.6
647	648213	5429689	0.02	2.9	INF	-2	1.55	8	18	3609	9.0	INF	INF	13.08	49	52.43
648	647323	5430762	0.04	INF	INF	INF	3.45	11	14	3395	9.4	INF	INF	24.01	90	84.55
649	646526	5431163	0.03	INF	INF	INF	0.89	-4	10	1341	6.1	INF	INF	12.5	74	86.89
650	648018	5432409	-0.02	3	-0.9	-2	0.8	7	8	4504	5.3	-0.9	-0.5	6.325	27	39.09
651	648135	5433141	0.03	INF	INF	INF	1.1	4	9	1790	7.8	INF	INF	10.65	71	88.73
652	648536	5433478	0.03	2.7	-0.9	-2	3.42	18	9	8971	9.9	-0.9	0.64	58.02	26	11.55
653	648852	5432785	-0.02	INF	INF	INF	1.39	8	12	8264	7.4	INF	INF	15.8	27	62.25
654	649716	5432343	0.03	3.5	INF	-2	2.69	21	17	8844	15.6	INF	INF	44.95	59	56.27
655	649703	5433415	0.04	5.3	INF	-2	3.57	17	23	16490	11.4	INF	INF	47.52	52	37.71
656	651167	5434050	0.02	4.1	INF	-2	3.57	26	17	13188	17.4	INF	INF	49.44	41	54.01
657	650907	5434971	0.05	5	-0.9	-2	4.53	21	18	12387	13.9	-0.9	-0.5	58.7	47	34.58
658	650031	5434569	0.04	6.7	-0.9	-2	5.4	27	21	14731	17.8	-0.9	-0.5	61.42	59	32.5
659	648458	5435036	-0.02	3.3	-0.9	-2	3.33	13	14	18942	9.5	-0.9	-0.5	20.98	51	41.32
660	647742	5434117	0.04	3.2	-0.9	-2	5.34	27	19	13377	15.7	-0.9	-0.5	74.55	54	19.59
661	647166	5433256	0.04	2.6	INF	-2	1.47	9	14	2769	6.3	INF	INF	16.81	82	79.25
662	646490	5432395	0.05	1.7	-0.9	-2	5.17	30	10	18412	13.4	-0.9	-0.5	70.52	78	31.56
663	646621	5432906	0.06	2	INF	-2	3.76	19	15	7161	13.0	INF	INF	48.26	73	64.14
664	646984	5434025	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
665	649403	5435534	-0.02	1.7	-0.9	-2	2.58	15	7	6765	9.0	-0.9	-0.5	33.45	21	7.68
666	650013	5435727	0.04	3.2	-0.9	-2	3.26	17	14	12666	10.5	-0.9	-0.5	36.01	59	39.54
667	650345	5436107	0.04	2.1	INF	-2	2.41	28	15	5670	15.7	INF	INF	27.54	68	74.72
668	650663	5436317	0.02	INF	INF	INF	1.44	7	12	2217	5.6	INF	INF	14.7	56	89.05
669	650933	5436172	-0.02	1.7	-0.9	-2	2.26	13	-5	6722	7.0	-0.9	-0.5	34.4	26	10.63
670	651161	5436657	0.05	2.7	INF	-2	6.04	26	22	10559	18.6	INF	INF	62.1	96	51.38
671	650249	5437268	-0.02	1.6	-0.9	-2	1.37	9	10	2337	6.8	-0.9	-0.5	11.2	31	27.51
672	652554	5446272	0.04	3.5	INF	-2	1.92	9	16	4101	14.7	INF	INF	22.44	80	81.64
673	651749	5446607	0.05	3	-0.9	-2	5.23	28	22	11918	16.7	-0.9	-0.5	92.18	65	30.63
674	651220	5445839	0.09	2.7	INF	-2	6.76	32	34	13442	21.2	INF	INF	119.85	92	48.68
675	649996	5445647	0.02	2.5	INF	-2	1.44	14	17	2965	16.3	INF	INF	21.5	60	78.85
676	648866	5446708	0.08	3.7	INF	-2	4.48	18	57	6152	18.7	INF	INF	69.79	80	60.48
677	649594	5445140	0.03	2.7	INF	-2	2.12	8	25	3321	13.5	INF	INF	27.46	85	81.98
678	649777	5444506	0.02	3.4	INF	-2	2	9	27	3722	13.1	INF	INF	42.08	64	77.02
679	651587	5444010	0.06	3.3	-0.9	-2	3.52	18	22	11874	13.1	-0.9	-0.5	57.85	71	50.33
680	647682	5444924	0.08	3.7	INF	-2	5.67	23	41	9566	19.9	INF	INF	69.62	122	62.66
681	647760	5443345	0.06	3.6	-0.9	-2	4.94	24	21	12150	15.2	-0.9	-0.5	75.2	79	27.9
682	649823	5442781	0.08	4.4	INF	-2	4.86	26	53	13149	20.1	INF	INF	83.53	94	59.28
683	650696	5441938	0.07	7.3	INF	-2	4.08	19	35	10366	17.8	INF	INF	47.74	72	64.87
684	646661	5441658	0.04	3.4	INF	-2	1.08	6	32	1649	12.4	INF	INF	20.12	75	85.39
685	647575	5441729	-0.02	1.4	-0.9	-2	0.59	5	12	1114	8.6	-0.9	-0.5	6.885	29	21.99
686	648434	5441278	0.04	3.7	INF	-2	3.02	16	17	7665	12.8	INF	INF	44.41	56	51.02
687	649241	5440633	0.03	2.2	INF	-2	2.1	11	16	3265	12.4	INF	INF	96.35	48	86.82
688	650117	5441145	0.12	2.9	-0.9	-2	5.22	22	87	8485	24.1	-0.9	1.09	203.1	60	52.56
689	650546	5439649	0.04	3.6	INF	-2	3.11	18	21	10116	14.1	INF	INF	34.94	47	62.54
690	651012	5440413	0.05	3.4	-0.9	-2	4.54	18	27	13552	16.7	-0.9	-0.5	51.62	56	33.73
691	648203	5439473	0.03	4.5	INF	-2	2.68	17	15	10246	14.1	INF	INF	45.47	61	52.14
692	648916	5439407	0.02	2.3	-0.9	-2	2.68	15	6	9809	7.6	-0.9	-0.5	39.6	45	16.58
693	648557	5438612	0.04	2.8	INF	-2	1.3	10	20	2007	11.9	INF	INF	21.04	75	82.96

Site	Easting NAD 27 UTM Zone 16	Northing Method——> Units——> D. L.——>	Ag ICP-MS ppm 0.02	As INAA ppm 0.5	Au FA ppb 0.9	Au INAA ppb 2	Co ICP-MS ppm 0.05	Cr ICP-OES ppm 4	Cu ICP-OES ppm 5	Fe ICP-OES ppm 5	Ni ICP-MS ppm 0.5	Pd FA ppb 0.9	Pt FA ppb 0.5	Total REEs La to Lu	Zn ICP-OES ppm 2	LOI Grav. % 0.05
694	650017	5437758	0.04	4.2	INF	-2	3.48	16	13	9565	13.7	INF	INF	47.3	69	55.88
695	649379	5436976	0.05	5.4	INF	-2	3.56	17	12	10543	14.7	INF	INF	47.68	73	63.48
696	649408	5436327	0.07	3.7	INF	-2	4.82	18	16	9784	16.2	INF	INF	56.84	70	57.84
697	646832	5436673	0.03	3.7	INF	-2	4.42	17	20	9797	19.2	INF	INF	45.7	78	67.17
698	647604	5437465	-0.02	3.3	INF	-2	1.02	-4	10	4222	6.7	INF	INF	8.84	69	88.79
699	646515	5438863	0.03	3.5	INF	-2	2.83	21	16	9318	16.5	INF	INF	43.13	58	63.93
700	646217	5435589	0.03	3.7	-0.9	-2	5.74	24	11	16603	15.2	-0.9	-0.5	75.88	47	11.86
701	646842	5436087	-0.02	2.7	INF	-2	1.88	10	9	3840	11.5	INF	INF	19.21	63	76.48
702	646837	5436136	0.03	4.6	INF	-2	3.1	12	14	5708	13.1	INF	INF	36.44	86	69.72
703	647760	5435417	0.03	5.7	INF	-2	3.31	31	16	11081	19.4	INF	INF	40.83	52	50.51
704	646697	5434705	0.04	3.5	-0.9	-2	4.29	20	13	12584	12.9	-0.9	-0.5	70.35	44	15.4
705	646122	5434204	0.05	4.6	-0.9	-2	5.72	25	16	13215	16.2	-0.9	-0.5	75.46	51	25.45
706	644023	5434492	0.05	4.7	-0.9	-2	9.46	38	19	21875	26.2	-0.9	-0.5	103.27	73	17.6
707	645286	5435120	0.03	5.2	-0.9	-2	5.5	23	9	15504	14.3	-0.9	-0.5	75.52	41	9.2
708	644692	5436016	0.03	6.5	INF	-2	1.52	6	12	4126	9.4	INF	INF	17.55	53	77.57
709	643725	5437718	-0.02	2.8	INF	-2	0.85	5	12	3066	6.6	INF	INF	12.04	68	76.41
710	643773	5437192	0.04	2.5	-0.9	-2	5.55	24	10	12932	14.7	-0.9	-0.5	75.08	40	10.55
711	643949	5439904	-0.02	2.9	INF	-2	2.16	22	17	8793	18.0	INF	INF	42.13	60	64.72
712	644488	5440801	0.03	3.5	INF	-2	2.51	13	20	6977	10.7	INF	INF	35.24	73	67.39
713	645291	5439515	0.06	4.3	INF	-2	4.95	22	22	11709	16.9	INF	INF	75.22	67	49.4
714	645573	5440195	0.06	4.1	-0.9	-2	4.84	23	21	13241	16.4	-0.9	-0.5	78.08	69	35.17
715	641934	5438361	0.04	4.9	INF	-2	2.93	20	16	8407	16.9	INF	INF	41.01	78	61.29
716	640718	5438280	0.02	4.7	INF	-2	0.91	-4	6	2714	5.0	INF	INF	11.2	95	87.9
717	640105	5439121	0.04	4.2	-0.9	-2	3.42	20	19	10062	13.2	-0.9	-0.5	56	47	35.87
718	639696	5436857	-0.02	1.9	-0.9	-2	3.15	16	11	8207	11.4	-0.9	-0.5	45.78	25	8.44
719	640669	5435134	0.04	4.4	INF	-2	4.8	27	20	12426	16.1	INF	INF	61.82	49	35.29
720	642057	5434306	-0.02	INF	INF	INF	1.04	5	12	2732	5.7	INF	INF	11.3	75	87.34
721	641456	5433853	-0.02	1.9	INF	-2	1.89	7	11	6270	7.6	INF	INF	12.27	55	81.71
722	641463	5433162	0.02	2.5	INF	-2	1.57	4	10	1341	6.9	INF	INF	8.845	72	89.65
723	644495	5432821	0.05	5.2	-0.9	-2	7.85	34	19	24200	20.2	-0.9	-0.5	97.25	82	23.57
724	645594	5431813	0.06	3.7	INF	-2	3.27	15	13	7526	9.3	INF	INF	38.03	64	67.73
725	645951	5430968	0.04	3.2	INF	-2	1.34	8	8	2779	7.0	INF	INF	15.8	50	81.31
726	644817	5430363	0.02	3.5	-0.9	-2	2.31	16	7	7822	6.6	-0.9	-0.5	35.72	73	37.28
727	644008	5431230	-0.02	3.7	-0.9	-2	0.93	7	8	3492	7.9	-0.9	-0.5	7.175	9	8.98
728	643033	5431845	-0.02	7.7	INF	-2	1.83	9	7	8206	7.2	INF	INF	22.34	101	69.5
729	630120	5390724	0.1	1.5	INF	-2	5.09	16	22	4069	13.0	INF	INF	430.73	61	63.67
730	630741	5394818	0.18	3.7	INF	-2	3.98	21	64	5240	13.0	INF	INF	387.79	46	61.41
731	633761	5396686	0.08	2.4	INF	-2	3.09	17	43	3048	17.5	INF	INF	240.83	51	53.61
732	633665	5400132	0.04	2.5	-0.9	-2	3.84	20	31	7312	15.3	-0.9	-0.5	77.37	48	33.02
733	633944	5404958	0.04	2.2	-0.9	-2	4.42	18	24	7557	12.2	-0.9	-0.5	92.55	54	23.59
734	635076	5410807	0.04	2.4	INF	-2	2.85	20	47	10856	25.2	INF	INF	155.76	63	54.67
735	637031	5413688	0.04	1.9	INF	-2	3.4	22	26	4197	16.2	INF	INF	58.93	57	63.48
736	639909	5417317	0.04	5.6	INF	-2	2.66	19	34	3774	14.1	INF	INF	44.03	60	68.12
737	638380	5421306	0.06	4.5	-0.9	-2	4.82	27	18	14447	16.3	-0.9	-0.5	82.39	51	20.54
738	640080	5424624	0.03	2.3	-0.9	-2	4.48	23	10	17918	10.9	-0.9	-0.5	76.32	40	8.59
739	641096	5426530	0.05	4	-0.9	-2	4.82	26	13	21055	13.0	-0.9	-0.5	86.8	56	16.12
740	641146	5427344	-0.02	1.7	-0.9	-2	3.28	19	9	10744	8.6	-0.9	0.75	58.45	40	11.15
741	641519	5428375	0.03	2.2	1.18	-2	3.8	25	6	8899	12.8	-0.9	-0.5	48.58	73	39.72
742	639734	5434490	0.03	2.4	INF	-2	1.77	10	17	3526	10.1	INF	INF	28.59	64	72.83
743	639349	5434117	0.03	3.9	INF	-2	2.05	12	32	4057	11.8	INF	INF	51.13	60	68.76
744	638745	5432447	0.1	2.8	-0.9	-2	5.81	23	33	12058	12.0	-0.9	-0.5	241.54	81	45.68
745	637080	5433002	0.14	2.1	-0.9	-2	2.86	14	212	3281	16.2	1.07	0.72	266.36	58	69.38
746	636861	5432244	0.12	2	-0.9	-2	4.69	18	59	8526	13.4	-0.9	-0.5	320.59	58	39.01
747	633926	5431150	0.05	5	-0.9	-2	3.66	18	18	9056	12.1	-0.9	-0.5	65.61	65	34.44
748	635214	5432872	0.07	7.2	INF	-2	2.69	10	33	6889	8.2	INF	INF	52.05	75	79.76
749	636409	5435026	0.03	2	-0.9	-2	4.12	18	11	9468	12.1	-0.9	-0.5	70.27	29	6.14
750	634920	5435126	0.04	4.6	-0.9	-2	2.58	14	19	7654	9.5	-0.9	-0.5	66.69	57	44.47
751	633551	5434880	0.06	INF	INF	INF	3.68	18	40	9403	15.0	INF	INF	74.84	69	62.94
752	633734	5433544	0.05	3.3	INF	-2	2.31	12	44	7492	10.5	INF	INF	52.23	61	66.19
753	633540	5432824	0.1	6.5	INF	-2	4.83	23	91	36300	15.2	INF	INF	99.97	80	70.68
754	633710	5432028	0.05	3.9	INF	-2	2.6	8	11	2989	6.1	INF	INF	19.06	69	80.18
755	633178	5431833	0.05	2.8	INF	-2	1.34	9	26	2311	7.7	INF	INF	30.31	64	74.7
756	632548	5432437	0.07	3.1	INF	-2	2.07	9	79	2849	9.1	INF	INF	80.31	77	72.66

Site	Easting NAD 27 UTM Zone 16	Northing Method----->>> Units----->>> D. L.----->>>	Ag ICP-MS ppm 0.02	As INAA ppm 0.5	Au FA ppb 0.9	Au INAA ppb 2	Co ICP-MS ppm 0.05	Cr ICP-OES ppm 4	Cu ICP-OES ppm 5	Fe ICP-OES ppm 5	Ni ICP-MS ppm 0.5	Pd FA ppb 0.9	Pt FA ppb 0.5	Total REEs La to Lu	Zn ICP-OES ppm 2	LOI Grav. % 0.05
757	632392	5431982	0.03	2.2	INF	-2	1.45	8	26	5490	8.0	INF	INF	36.43	70	77.46
758	632285	5431437	0.03	1.9	-0.9	-2	1.89	10	24	4170	8.7	-0.9	-0.5	63.28	40	50.7
759	631368	5430510	0.07	1.7	-0.9	-2	4.63	22	23	9989	12.0	-0.9	0.62	152.42	63	23.65
760	630565	5431383	0.04	2.1	-0.9	-2	1.64	9	18	3933	7.4	-0.9	-0.5	68.28	32	49.48
761	630156	5432111	0.08	3.6	INF	-2	2.29	12	73	2133	14.0	INF	INF	164.37	66	67.32
762	630896	5433322	0.09	2.6	-0.9	-2	5.36	24	32	10659	15.3	-0.9	-0.5	157.9	75	47.84
763	629533	5433367	0.09	3.2	-0.9	-2	4.45	19	47	5960	14.6	-0.9	-0.5	144.1	66	51.75
764	629022	5432187	0.06	2.6	INF	-2	1.95	9	34	2422	7.7	INF	INF	90.03	51	69.39
765	629379	5431577	0.06	2.4	-0.9	-2	1.27	10	41	1959	8.4	-0.9	-0.5	104.12	61	60.44
766	628211	5430466	0.05	2.8	INF	-2	1.44	11	18	2839	9.3	INF	INF	45.94	57	68.29
767	628710	5428663	0.04	4.2	INF	-2	2.17	17	31	4136	17.7	INF	INF	44.3	68	63.88
768	630400	5428258	0.05	3.2	INF	-2	1.98	7	39	1405	11.7	INF	INF	34.75	58	75.51
769	630401	5428538	0.05	3.3	-0.9	-2	3.3	16	49	9054	15.2	-0.9	-0.5	86.3	40	33.89
770	628996	5427206	0.06	2.2	-0.9	-2	1.94	8	53	2271	10.1	-0.9	-0.5	79.6	47	55.11
771	626032	5427167	0.07	2.1	-0.9	-2	3.32	16	57	4969	13.7	-0.9	-0.5	127.62	48	34.84
772	625197	5425633	0.04	2.6	-0.9	-2	2.16	12	43	4566	13.0	-0.9	-0.5	66.88	42	30.09
773	623385	5424997	0.06	3.2	INF	-2	2.18	15	46	3536	21.0	INF	INF	59.97	58	65.5
774	625417	5421218	0.08	7.6	-0.9	-2	5.74	23	49	36832	11.7	-0.9	0.55	69.2	94	51.74
775	628457	5417173	0.03	1.8	INF	-2	1.92	7	33	1211	11.0	INF	INF	47.81	31	75.55
776	628927	5411167	0.03	1.5	-0.9	-2	2.43	12	14	6793	6.3	-0.9	-0.5	50.53	36	14.37
777	629359	5404561	-0.02	2.7	-0.9	-2	1.32	7	26	3057	14.3	-0.9	-0.5	20.89	45	33.97
778	633185	5385141	0.08	2.8	-0.9	-2	2.06	10	37	4094	10.7	-0.9	-0.5	105.77	58	52.91
779	633717	5385395	0.07	2.1	6.11	-2	2.44	13	35	2192	10.8	-0.9	-0.5	146.49	52	52.67
780	636492	5386455	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
781	640826	5391829	0.07	2.3	-0.9	-2	2.5	11	31	2295	9.7	-0.9	-0.5	257.97	45	44.11
782	640592	5390978	0.06	2.4	-0.9	-2	1.32	9	37	1376	7.6	-0.9	-0.5	208.89	34	42.14
783	643492	5398973	0.04	1.4	-0.9	-2	2.31	8	21	1676	15.8	-0.9	-0.5	81.88	46	62.62
784	642827	5401266	0.08	1.9	INF	-2	2.12	14	27	2957	13.6	INF	INF	110.88	53	70
785	644267	5403753	0.07	1.9	-0.9	-2	6.16	37	43	12996	44.7	-0.9	0.9	116.19	68	35.13
786	644182	5405662	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
787	643757	5410149	0.08	2.2	-0.9	-2	6.87	34	42	14385	29.1	-0.9	0.66	121.1	59	20.58
788	645244	5411354	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
789	640371	5420690	-0.02	3.3	-0.9	-2	1.28	8	10	6501	5.6	-0.9	-0.5	28.39	25	46.78
790	640773	5420460	0.02	3.3	INF	-2	2.61	11	10	9987	8.0	INF	INF	29.41	42	58.59
791	641122	5420026	0.05	5.6	INF	-2	2.19	14	26	6391	9.1	INF	INF	17.94	77	78.44
792	641868	5419599	0.02	2.3	INF	-2	1.08	-4	7	2913	4.4	INF	INF	7.575	48	86.39
793	640074	5420529	0.03	2	-0.9	-2	2.36	17	34	4902	9.6	-0.9	-0.5	23.79	21	10.31
794	640139	5419791	0.05	3.7	INF	-2	1.9	10	39	2305	10.2	INF	INF	31.68	54	73.18
795	639151	5418595	0.08	7.1	INF	-2	4.46	24	73	18655	17.2	INF	INF	88.26	64	61.96
796	637944	5417663	0.03	2.5	-0.9	-2	3.11	14	19	5954	10.4	-0.9	-0.5	64.84	50	50.27
797	640212	5418063	0.06	5.8	INF	-2	2.93	24	50	4185	19.2	INF	INF	49.17	61	76.77
798	641352	5418523	-0.02	5.5	-0.9	-2	2.13	15	23	8169	6.7	-0.9	-0.5	19.28	20	15.38
799	640876	5417607	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
800	641188	5416871	-0.02	1.6	-0.9	-2	1.6	11	6	6882	5.3	-0.9	-0.5	24.99	17	9.65
801	640347	5416229	0.04	7.6	-0.9	-2	6.1	20	20	13299	11.9	-0.9	-0.5	62.18	46	11.77
802	638150	5416354	0.02	4.1	INF	-2	1.24	6	16	2288	10.6	INF	INF	17.74	72	81.69
803	642889	5417852	0.06	6.2	1.31	-2	6.21	25	24	12430	16.3	-0.9	0.74	64.3	58	34.95
804	642713	5416588	0.06	6	-0.9	-2	5.42	22	25	12069	13.5	-0.9	0.55	73.18	52	37.02
805	641105	5415364	0.04	5.4	-0.9	-2	5.21	19	12	11164	9.4	-0.9	-0.5	67.63	46	11.37
806	640841	5414545	0.08	10	-0.9	-2	5.59	27	38	23447	11.8	-0.9	0.66	80.09	65	42.46
807	641338	5414052	0.07	11	-0.9	-2	4.96	28	37	29839	11.5	1.02	0.95	81.51	60	47.58
808	645115	5416485	0.04	0.8	-0.9	-2	2.81	6	47	1666	12.6	-0.9	0.59	28.85	11	70.32
809	643700	5415404	0.07	2.9	-0.9	-2	4.26	19	119	4278	14.1	3.37	1.34	72.77	52	47.35
810	642909	5415678	0.06	5.6	INF	-2	2.8	10	91	6909	12.2	INF	INF	44.9	48	58.96
811	642617	5415521	0.03	3.5	INF	-2	1.82	7	40	12411	8.0	INF	INF	15.2	54	78
812	641738	5415136	0.07	2.4	-0.9	-2	6.07	24	61	11154	20.4	-0.9	0.92	68.72	63	42.82
813	642185	5414832	0.16	1.8	-0.9	-2	6.26	27	131	8403	25.5	2.13	1.08	101.77	83	38.75
814	642025	5414288	0.04	5.4	INF	-2	2.21	14	56	3927	8.1	INF	INF	29.48	81	67.51
815	643266	5413905	0.12	1.8	-0.9	-2	4.16	13	131	4293	20.4	0.99	0.67	49.17	70	44.02
816	646475	5412749	0.03	2.9	INF	-2	1.71	5	10	2521	4.8	INF	INF	21.24	87	85.51
817	645036	5409199	0.1	1	-0.9	-2	4.6	6	107	1999	12.9	-0.9	-0.5	81.9	41	49.96
818	645493	5407716	0.18	2.2	-0.9	-2	10.24	10	213	3373	36.5	-0.9	-0.5	69.41	68	59.44
819	645762	5405801	0.11	1	-0.9	-2	3.67	11	58	2165	34.9	-0.9	-0.5	102.2	52	40.65

Site	Easting NAD 27 UTM Zone 16	Northing Method-----> Units-----> D. L.----->	Ag ICP-MS ppm 0.02	As INAA ppm 0.5	Au FA ppb 0.9	Au INAA ppb 2	Co ICP-MS ppm 0.05	Cr ICP-OES ppm 4	Cu ICP-OES ppm 5	Fe ICP-OES ppm 5	Ni ICP-MS ppm 0.5	Pd FA ppb 0.9	Pt FA ppb 0.5	Total REEs La to Lu	Zn ICP-OES ppm 2	LOI Grav. % 0.05
820	645885	5403286	0.14	1.8	-0.9	-2	4.03	11	64	1737	33.4	-0.9	-0.5	203.43	62	53.33
821	628168	5388136	0.18	3.2	-0.9	-2	7.04	21	43	6334	12.0	-0.9	-0.5	506.12	60	41.9
822	630260	5392325	0.12	1.7	-0.9	-2	5.25	22	27	8440	12.9	-0.9	-0.5	413.32	60	45.07
823	629459	5395905	0.1	2.1	-0.9	-2	4.14	25	28	6571	13.4	-0.9	-0.5	267.53	47	36.18
824	627984	5399051	0.04	6.2	INF	-2	3.64	19	31	5944	15.7	INF	INF	94.9	66	69.63
825	627111	5399625	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
826	626982	5401715	0.03	2.7	-0.9	-2	3.09	17	16	6454	13.7	-0.9	-0.5	54.46	48	39.19
827	626567	5402053	0.08	2.8	-0.9	-2	2.98	16	48	3643	16.4	-0.9	-0.5	298.9	76	51.95
828	626462	5404684	0.07	3.5	-0.9	-2	3.33	21	19	7281	12.5	-0.9	-0.5	89.57	54	37.59
829	628276	5407531	0.09	2.1	-0.9	-2	4.71	23	49	7753	17.0	-0.9	-0.5	108.2	59	51.59
830	628788	5412936	0.08	3.3	-0.9	-2	4.26	21	44	7385	14.0	-0.9	-0.5	97.78	59	64.79
831	629439	5417212	0.06	1.9	-0.9	-2	3.36	11	40	2315	14.5	-0.9	-0.5	67.3	47	73.24
832	627585	5420320	0.08	5.4	INF	-2	2.43	16	102	10472	13.8	INF	INF	107.11	44	62.5
833	628096	5422859	0.04	7.6	-0.9	-2	3.02	10	29	7716	6.3	-0.9	-0.5	77.96	64	65.19
834	627643	5422350	0.07	3.8	INF	-2	2.63	14	43	3249	10.1	INF	INF	57.2	69	79.4
835	627541	5421823	0.07	10	INF	-2	3.33	13	49	8690	8.8	INF	INF	94.29	53	80.32
836	627860	5421382	0.07	3.8	INF	-2	3.39	13	45	3919	13.5	INF	INF	65.64	61	70.24
837	628955	5420459	0.13	3.8	-0.9	-2	5.78	29	52	13050	17.4	-0.9	-0.5	175.45	71	37.28
838	630226	5422049	0.09	3	-0.9	-2	5.73	24	51	8843	17.8	-0.9	-0.5	140.62	58	46.57
839	630793	5422654	0.07	2.2	-0.9	-2	2.64	12	48	3953	11.2	-0.9	-0.5	82.61	46	55.24
840	631088	5421252	0.13	4.7	-0.9	-2	9.52	34	71	12633	20.6	-0.9	0.79	274.03	102	42.22
841	632155	5420901	0.11	2.5	-0.9	-2	4.57	18	29	7348	14.5	-0.9	-0.5	193.12	52	63.47
842	632772	5421757	0.1	2.5	-0.9	-2	4.65	21	36	5541	14.0	-0.9	-0.5	200.46	46	57.06
843	632449	5422324	0.07	1.8	-0.9	-2	1.97	8	56	1342	19.1	-0.9	-0.5	92.5	37	46.62
844	631765	5424428	0.15	1.7	-0.9	-2	6.64	9	204	1842	30.4	-0.9	-0.5	79.07	42	63.8
845	632285	5423584	0.03	1.6	INF	-2	1.19	5	34	1521	8.1	INF	INF	20.2	43	68.56
846	632929	5423564	0.06	1.9	-0.9	-2	1.9	11	52	3106	12.0	-0.9	-0.5	88.56	41	46.64
847	633668	5422946	0.06	2.4	INF	-2	1.62	10	51	1980	10.2	INF	INF	79.47	42	67.2
848	634243	5423555	0.05	2.3	INF	-2	1.48	9	35	1644	10.8	INF	INF	80.03	45	67.71
849	634170	5424115	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
850	633107	5426097	0.02	2.4	INF	-2	1.25	5	9	1957	6.0	INF	INF	20.8	62	74.27
851	635637	5426911	0.13	3	-0.9	-2	5.62	20	106	8627	15.0	-0.9	-0.5	147.89	61	48.54
852	634801	5426442	0.13	2.4	-0.9	-2	5.57	25	51	8392	14.9	-0.9	-0.5	169.85	98	54.4
853	635196	5425896	0.07	2.1	-0.9	-2	5.02	11	36	2645	14.5	-0.9	-0.5	55.93	72	63.91
854	635060	5425278	0.06	2.4	INF	-2	1.56	7	77	2224	8.8	INF	INF	45.58	63	76.58
855	635862	5425613	0.05	2.5	-0.9	-2	2.43	13	35	3476	12.0	-0.9	-0.5	48.5	62	67.27
856	636182	5424879	0.06	1.8	INF	-2	1.89	8	34	2878	8.3	INF	INF	38.47	50	74.65
857	635815	5424330	0.03	2.1	INF	-2	2.14	5	36	2002	13.0	INF	INF	24.05	53	85.94
858	636906	5425025	0.04	1.6	-0.9	-2	3.38	14	21	4771	12.3	-0.9	-0.5	59.15	47	42.65
859	637305	5427295	0.04	1.9	INF	-2	2.45	9	37	1461	14.7	INF	INF	52.97	43	70.2
860	638213	5426160	0.06	2.8	INF	-2	1.87	10	35	1594	10.9	INF	INF	108.39	44	62.65
861	637182	5424524	0.06	2.4	INF	-2	1.89	9	36	2396	9.3	INF	INF	57.64	61	72.28
862	637924	5422948	0.05	2.6	-0.9	-2	4.65	15	38	4248	15.4	-0.9	-0.5	71.2	61	55.89
863	636862	5421734	0.06	2.2	INF	-2	3.08	7	66	1131	6.9	INF	INF	97.41	50	87.85
864	635884	5422042	0.04	1.6	-0.9	-2	3.31	15	27	5330	11.8	-0.9	0.98	59.99	38	44.87
865	635390	5422789	0.06	1.5	-0.9	-2	5.12	22	25	8996	14.0	-0.9	-0.5	96.4	52	28.42
866	634665	5421026	0.1	3.1	-0.9	-2	6.66	24	56	5740	20.4	-0.9	-0.5	185.78	53	50.89
867	635637	5420214	0.03	1.7	-0.9	-2	3.12	14	17	5660	7.6	-0.9	-0.5	57.17	32	26.66
868	634570	5419828	0.1	2	-0.9	-2	5.58	23	76	8334	17.0	-0.9	0.54	106.31	57	46.77
869	633570	5419743	0.08	2.1	-0.9	-2	4.29	20	61	4697	20.9	-0.9	-0.5	106.65	41	42.42
870	632413	5420014	0.02	1.5	-0.9	-2	1.88	8	23	3107	16.6	-0.9	-0.5	49.67	42	52.69
871	633394	5418528	0.04	1.6	-0.9	-2	2.77	16	20	5405	8.6	-0.9	-0.5	78.87	42	20.16
872	631061	5412451	0.05	2.5	-0.9	-2	4.09	10	25	5414	8.2	-0.9	-0.5	65.99	89	65.02
873	628171	5402212	0.03	2.8	-0.9	-2	2.88	11	19	2449	9.9	-0.9	-0.5	58.85	50	64.24
874	630647	5393711	0.08	2.7	-0.9	-2	6.2	13	21	8671	8.4	-0.9	-0.5	245.28	74	59.97
875	626724	5391613	0.13	4.8	INF	-2	7.16	20	32	9907	12.2	INF	INF	200.28	85	57.6
876	627741	5393419	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
877	628016	5394459	0.2	2.9	-0.9	-2	4.32	19	66	4876	10.7	-0.9	-0.5	296.14	69	42.73
878	627932	5395324	0.13	3.3	-0.9	-2	4.03	17	49	7186	11.0	-0.9	-0.5	241.61	58	48.34
879	628555	5398540	0.05	5.5	INF	-2	3.2	20	22	9072	18.6	INF	INF	64.49	65	58.04
880	629902	5403464	0.06	2.9	-0.9	-2	2.2	14	35	3220	19.0	-0.9	-0.5	42.3	80	63.87
881	629647	5411960	0.08	2.6	-0.9	-2	3.8	14	40	6241	11.2	-0.9	-0.5	86.88	57	47.77
882	630083	5411175	0.08	3.4	INF	-2	2.38	10	49	2618	9.1	INF	INF	117.36	51	63.32

Site	Easting NAD 27 UTM Zone 16	Northing Method-------> Units-------> D. L.------->	Ag ICP-MS ppm 0.02	As INAA ppm 0.5	Au FA ppb 0.9	Au INAA ppb 2	Co ICP-MS ppm 0.05	Cr ICP-OES ppm 4	Cu ICP-OES ppm 5	Fe ICP-OES ppm 5	Ni ICP-MS ppm 0.5	Pd FA ppb 0.9	Pt FA ppb 0.5	Total REEs La to Lu	Zn ICP-OES ppm 2	LOI Grav. % 0.05
883	629621	5410294	0.05	2.2	INF	-2	1.79	8	35	2713	9.3	INF	INF	57.6	53	64.86
884	628829	5409359	0.1	3.3	-0.9	-2	2.53	10	65	3053	14.5	-0.9	-0.5	70.24	52	67.65
885	628825	5408528	0.03	2.6	-0.9	-2	0.83	6	32	2412	7.6	-0.9	-0.5	7.915	32	24.99
886	627577	5408298	0.12	4.5	INF	-2	5.15	25	58	9922	19.4	INF	INF	95.51	68	51.16
887	627312	5407916	0.12	3.4	-0.9	-2	6.35	24	56	9764	16.2	-0.9	-0.5	137.33	76	44.21
888	627367	5407316	0.15	3.1	-0.9	-2	6.14	29	49	10005	17.7	-0.9	-0.5	145.31	90	42.23
889	627352	5413227	0.04	2.8	-0.9	-2	1.6	8	41	5274	14.9	-0.9	-0.5	55.69	42	49.02
890	627139	5414258	0.08	3.7	INF	-2	2.28	11	61	3189	12.4	INF	INF	80.52	80	78.85
891	626841	5419659	0.11	6.6	-0.9	-2	4.26	22	95	19577	18.3	-0.9	-0.5	121.14	62	54.66
892	626394	5419906	0.03	4.6	-0.9	-2	2.28	12	51	6690	13.7	-0.9	-0.5	38.38	44	30.69
893	625926	5418910	0.1	3.3	INF	-2	3.8	16	115	3813	18.3	INF	INF	105.64	62	62.92
894	626420	5418695	0.07	4.7	-0.9	-2	2.63	19	42	8148	12.7	-0.9	-0.5	128.21	51	52.27
895	627401	5418425	0.13	2.6	-0.9	-2	4.07	18	51	5052	14.2	-0.9	-0.5	213.69	52	43.98
896	626158	5418168	0.1	2.2	-0.9	-2	4.66	20	35	5839	16.1	-0.9	-0.5	125.47	63	52.39
897	623860	5420643	0.04	2.5	INF	-2	2.04	7	43	1115	14.0	INF	INF	25.76	58	86.5
898	623265	5419935	0.15	2.2	-0.9	-2	5.42	18	173	6308	28.2	-0.9	-0.5	162.25	45	47.27
899	622656	5419322	0.1	3	-0.9	-2	5.83	19	54	6929	13.0	-0.9	-0.5	138.81	76	49.32
900	622370	5418746	0.12	2.6	-0.9	-2	5.11	17	79	5091	14.4	-0.9	-0.5	151.79	72	54.78
901	623507	5418772	0.07	1.5	-0.9	3	1.49	8	51	1792	12.7	-0.9	-0.5	85.12	51	54.05
902	622767	5417525	0.1	3.3	-0.9	-2	4.6	18	56	4400	16.2	-0.9	-0.5	113.04	67	58.27
903	622753	5415980	0.06	2.9	-0.9	-2	2.16	8	77	1860	15.9	-0.9	-0.5	56.25	57	68.26
904	622406	5415285	0.03	2.2	INF	-2	1.34	7	31	1176	9.8	INF	INF	22.44	58	80.34
905	623926	5416109	0.14	2.4	-0.9	-2	4.53	11	35	3792	14.0	-0.9	-0.5	145.07	70	62.33
906	623930	5415453	0.03	2.2	-0.9	-2	4.54	7	21	2398	13.1	-0.9	-0.5	87.4	33	65.37
907	625632	5416550	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
908	625040	5415385	0.03	1.1	-0.9	-2	3.77	17	35	6975	10.4	-0.9	-0.5	101.81	48	22.42
909	625210	5414458	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
910	625744	5414061	0.05	3.1	-0.9	-2	3.62	20	26	8248	17.3	-0.9	-0.5	68.34	46	40.71
911	623599	5413870	0.06	2.9	INF	-2	1.71	8	33	2632	8.0	INF	INF	25.81	91	76.79
912	623396	5413893	0.05	INF	INF	INF	1.12	7	35	1525	7.9	INF	INF	20.08	113	84.26
913	624961	5412806	0.08	2.8	-0.9	-2	4.16	23	25	9176	13.1	-0.9	-0.5	108.52	56	34.85
914	624940	5411812	0.05	3.1	INF	-2	3.88	10	21	3178	11.0	INF	INF	50.2	63	67.12
915	622548	5411541	0.06	2.2	-0.9	-2	3.33	17	23	8628	11.0	-0.9	-0.5	80.7	42	23.86
916	623909	5411535	0.12	4	-0.9	-2	5.06	31	38	10694	17.5	-0.9	-0.5	161.7	74	43.17
917	624883	5410782	0.12	2.3	-0.9	-2	5.94	25	50	8742	17.5	-0.9	-0.5	177.72	55	34.3
918	623977	5409100	0.12	2.2	-0.9	-2	5.52	17	80	3595	18.1	-0.9	-0.5	158.24	58	48.29
919	622486	5407790	0.08	4.9	7.52	-2	9.64	31	28	25102	15.8	-0.9	-0.5	147.26	78	22.38
920	624056	5407451	0.09	1.5	-0.9	-2	4.49	16	43	4170	19.5	-0.9	-0.5	161.1	49	59.37
921	623972	5406420	0.07	2.5	INF	-2	3.74	17	42	4149	22.0	INF	INF	104.6	59	64.53
922	625276	5405537	0.14	4.4	-0.9	-2	10.84	45	39	29790	21.9	-0.9	-0.5	217.89	103	36.03
923	625258	5403471	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
924	627829	5404122	0.04	2.5	INF	-2	1.38	8	18	2476	11.7	INF	INF	29.41	51	62.18
925	628838	5404037	0.04	2.7	INF	-2	2.21	16	25	2974	17.9	INF	INF	40.2	69	66.34
926	625337	5401972	0.17	4.9	INF	-2	7.5	23	201	8861	42.1	INF	INF	231.39	54	60.4
927	629152	5391748	0.16	1.8	-0.9	-2	3.14	16	18	3768	8.0	-0.9	-0.5	495.38	59	46.25
928	630242	5387448	0.06	1.7	INF	-2	1.38	12	19	2598	11.8	INF	INF	313.05	28	33.45
929	634089	5390107	0.1	2.3	INF	-2	5.92	20	31	6056	23.5	INF	INF	502.2	69	55.67
930	636210	5392477	0.19	3	-0.9	-2	5.53	22	31	7845	13.0	-0.9	-0.5	355.13	61	41.04
931	638821	5394088	0.09	2.3	INF	-2	3.9	24	44	5524	18.0	INF	INF	237.4	49	48.78
932	639936	5396781	0.07	2.8	INF	-2	2.65	8	106	4568	15.2	INF	INF	78.76	20	80
933	637967	5400205	0.08	4.3	-0.9	-2	4.34	18	87	9227	24.1	0.96	1.09	71.62	51	34.52
934	638927	5400596	0.08	4.9	-0.9	-2	4.52	17	120	4699	32.5	1.53	1.45	61.88	58	58.94
935	638290	5402368	0.02	1.9	-0.9	-2	1.34	5	25	2795	13.2	-0.9	-0.5	43.86	40	50.14
936	638427	5401823	0.04	1.9	-0.9	-2	1.15	6	25	2510	8.1	-0.9	-0.5	52.6	20	71.22
937	638897	5401275	0.08	5.3	INF	-2	2.89	14	91	5185	33.8	INF	INF	64.4	49	68.2
938	639439	5401433	0.13	4.9	INF	-2	3.72	14	173	6159	26.3	INF	INF	73.75	49	57.2
939	639136	5401862	0.1	2.1	-0.9	-2	2.86	8	103	4259	17.5	-0.9	-0.5	105.0	61	64.98
940	639950	5401652	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
941	640534	5401794	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
942	641090	5401670	0.13	2.5	-0.9	-2	5.52	32	113	7452	46.4	-0.9	-0.5	87.27	45	47.16
943	641570	5401814	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
944	641017	5403465	0.06	1.7	-0.9	-2	1.04	8	71	1754	25.9	-0.9	0.66	70.18	26	64.23
945	642619	5403546	0.06	5.7	INF	-2	1.78	9	63	3325	18.3	INF	INF	30.6	75	78.74

Site	Easting NAD 27 UTM Zone 16	Northing Method -----> Units -----> D. L. ----->	Ag ICP-MS ppm 0.02	As INAA ppm 0.5	Au FA ppb 0.9	Au INAA ppb 2	Co ICP-MS ppm 0.05	Cr ICP-OES ppm 4	Cu ICP-OES ppm 5	Fe ICP-OES ppm 5	Ni ICP-MS ppm 0.5	Pd FA ppb 0.9	Pt FA ppb 0.5	Total REEs La to Lu	Zn ICP-OES ppm 2	LOI Grav. % 0.05
946	643504	5402999	0.06	1.3	-0.9	-2	2.97	9	40	1713	16.6	-0.9	-0.5	68.52	63	64.22
947	644002	5402566	0.11	1.8	-0.9	-2	7.24	20	101	3791	35.9	-0.9	-0.5	134.63	65	49.96
948	643731	5401942	0.13	1.7	-0.9	-2	6.52	16	45	6640	20.9	-0.9	-0.5	143.56	70	53.3
949	643212	5402386	0.1	1.9	2.19	-2	4.32	14	39	2927	19.9	-0.9	-0.5	184.14	48	48.93
950	642165	5405694	0.09	3	-0.9	-2	9.04	39	64	6614	84.2	-0.9	-0.5	222.64	54	55.51
951	641879	5406967	0.23	1.7	-0.9	-2	7.31	23	71	7002	65.9	-0.9	-0.5	73.72	107	62.93
952	642324	5406332	0.14	1.7	-0.9	-2	12.9	52	78	4027	198.5	-0.9	-0.5	88.25	172	64.02
953	642656	5405790	0.15	2.2	-0.9	-2	11.17	44	126	2799	145.5	-0.9	-0.5	401.93	55	55.74
954	642835	5405600	0.29	2.6	-0.9	-2	16.89	32	144	12606	95.7	-0.9	-0.5	307.85	104	56.23
955	640745	5407418	0.12	2.8	-0.9	-2	5.23	24	100	7684	30.2	-0.9	-0.5	106.25	68	40.69
956	641257	5409146	0.05	1.8	INF	-2	1.87	4	84	5079	25.2	INF	INF	25.98	40	68.34
957	642013	5408639	0.12	1.4	-0.9	-2	5.5	7	151	1166	29.4	-0.9	-0.5	52.31	75	62.95
958	642534	5409547	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
959	643372	5409275	0.04	1.9	-0.9	-2	8.64	39	52	10408	74.7	-0.9	-0.5	89.47	72	44.99
960	643147	5409159	0.04	2.6	-0.9	-2	8	35	48	9290	72.1	-0.9	-0.5	68.86	69	39.25
961	641109	5413347	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
962	641356	5412576	0.04	3.7	-0.9	4	1.8	11	48	5037	20.8	-0.9	-0.5	43.08	60	44.74
963	640693	5411541	0.06	8.3	INF	-2	3	17	33	13045	23.8	INF	INF	85.83	80	56.77
964	640625	5410636	-0.02	3.2	-0.9	-2	0.68	5	9	3726	5.1	-0.9	-0.5	9.715	13	17.35
965	639842	5410319	0.07	3.2	INF	-2	2	9	15	3016	7.9	INF	INF	28.55	58	70.46
966	640114	5410429	0.04	INF	INF	INF	0.91	5	9	1454	5.2	INF	INF	20.41	114	86.14
967	638619	5408431	0.03	1.3	-0.9	-2	2.33	12	17	5304	7.3	-0.9	-0.5	59.24	26	24.52
968	639463	5407974	0.04	3.1	-0.9	-2	1.96	12	24	5393	9.5	-0.9	-0.5	62.31	33	38.22
969	639433	5407047	0.06	3.2	-0.9	-2	3.2	18	45	6302	14.7	0.94	0.65	96.97	49	51.53
970	639861	5406827	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
971	639559	5406319	0.06	4.8	INF	-2	2.35	10	61	5140	13.8	INF	INF	55.86	46	80.34
972	639946	5405495	0.13	7.4	INF	-2	3.48	16	110	11315	19.1	INF	INF	66.0	54	70.71
973	640441	5405090	0.04	2.7	-0.9	-2	0.92	8	79	1883	10.8	-0.9	-0.5	23.13	25	30.07
974	640305	5404542	0.1	7.3	INF	-2	2.25	12	93	2803	19.8	INF	INF	41.27	175	84.55
975	639298	5403626	0.07	2.7	INF	-2	1.77	9	81	1420	12.1	INF	INF	86.46	40	66.82
976	639507	5403074	0.11	5.9	-0.9	-2	3.72	17	100	9651	12.1	-0.9	-0.5	145.77	53	60.19
977	640190	5403029	0.08	2	-0.9	-2	2.23	12	47	3876	11.3	-0.9	-0.5	47.39	24	12.98
978	637056	5403138	0.06	2.6	INF	-2	1.95	12	65	2130	24.7	INF	INF	81.97	57	69.86
979	635138	5402089	0.04	4.1	INF	-2	1.72	8	58	1328	11.5	INF	INF	56.36	64	69.24
980	632775	5401193	0.04	2.2	INF	-2	2.24	7	52	1228	22.1	INF	INF	38.84	51	76.93
981	633259	5399174	0.05	1.5	INF	-2	1.65	13	15	2760	8.8	INF	INF	27	86	78.73
982	632177	5392269	0.12	1.6	-0.9	-2	4.43	19	36	3482	14.9	-0.9	-0.5	486.2	56	45.2
983	632772	5389375	0.09	1.4	-0.9	-2	4.59	22	25	5920	15.2	-0.9	-0.5	416.62	53	38.32
984	635957	5396405	0.27	3	-0.9	-2	4.65	19	54	5171	11.4	-0.9	-0.5	411.75	62	41.21
985	636391	5398961	0.07	4.1	-0.9	-2	3.15	22	51	10185	21.9	-0.9	-0.5	142.18	62	44.54
986	637128	5400284	0.12	6.6	QC	-2	3.66	20	93	12916	16.6	QC	QC	122.87	69	41.05
987	636887	5403804	0.09	2.3	QC	-2	4.53	17	53	4066	13.7	QC	QC	106.33	54	49.05
988	637706	5407876	0.05	2.7	INF	-2	2.01	9	22	2269	10.9	INF	INF	59.82	72	71.67
989	637037	5408395	0.04	1.8	QC	-2	1.66	8	19	1604	12.3	QC	QC	59.03	48	67.35
990	637412	5412248	0.06	3.4	QC	-2	3.14	16	33	8481	18.9	QC	QC	82.82	56	51.09
991	635897	5414816	0.07	2	QC	-2	4.25	24	18	9325	12.0	QC	QC	85.39	47	30.66
992	636402	5416034	0.08	3.8	QC	-2	4.61	22	25	8821	12.6	QC	QC	75.67	60	42.11
993	636516	5418807	0.04	4.4	QC	-2	2.32	15	9	6803	8.6	QC	QC	34.25	73	63.63
994	636642	5418203	0.04	2.7	QC	-2	2.64	13	13	7717	9.3	QC	QC	29.47	53	63.3
995	635819	5417546	0.04	2.1	QC	-2	3.73	21	16	8853	9.1	QC	QC	67.99	39	24.19
996	636033	5417293	0.03	2.7	QC	-2	2.27	12	7	6589	6.8	QC	QC	36.57	40	41.41
997	635654	5416989	0.05	2.2	QC	-2	5.11	23	18	9704	11.6	QC	QC	82.14	55	20.35
998	634568	5416631	0.03	6.8	QC	-2	2.8	15	25	8556	13.2	QC	QC	55.79	47	37.8
999	631892	5415910	0.04	2.2	QC	-2	2.72	12	27	3148	16.9	QC	QC	56.84	43	47.22
1000	630550	5418035	0.08	2.3	QC	-2	5.53	20	37	7830	16.8	QC	QC	100.89	63	38.63
1001	630316	5416561	0.08	2.5	QC	-2	4.08	16	28	6055	15.3	QC	QC	81.15	52	37.27
1002	629558	5415505	0.04	1.9	INF	-2	1.65	10	28	4971	18.8	INF	INF	88.89	47	68.64
1003	634547	5415510	-0.02	-0.5	QC	-2	2.39	8	-5	4948	3.6	QC	QC	46.72	19	2.54
1004	633697	5415854	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1005	633436	5414340	0.03	3.1	QC	-2	2.99	11	21	5508	13.7	QC	QC	33.45	49	55
1006	631798	5413231	0.04	2.7	QC	-2	1.5	7	83	1027	9.3	QC	QC	60.22	45	47.19
1007	632709	5412680	0.03	2.5	INF	-2	2.25	6	17	2179	13.6	INF	INF	23.27	82	81.62
1008	632591	5411972	0.03	2.4	INF	-2	1.83	8	27	1869	14.2	INF	INF	41.61	80	72.45

Site	Easting NAD 27 UTM Zone 9N	Northing Method -----> Units -----> ft, L ----->	Ag ICP-MS ppm 0.02	As INAA ppm 0.5	Au FA ppb 0.9	Au INAA ppb 2	Co ICP-MS ppm 0.05	Cr ICP-OES ppm 4	Cu ICP-OES ppm 5	Fe ICP-OES ppm 5	Ni ICP-MS ppm 0.5	Pd FA ppb 0.9	Pt FA ppb 0.5	Total REEs La to Lu	Zn ICP-OES ppm 2	LOI Grav. % 0.05
10099	6.317721	5411381	0.05	3.5	INF	-2	3.07	9	45	5772	10.4	INF	INF	54.49	83	60.85
10100	6.310899	5409966.42	0.04	3	QC	-2	1.53	8	28	2551	15.2	QC	QC	30.66	62	58.03
10101	6.346602	5411817	0.08	2.3	QC	-2	5.11	17	20	5390	9.2	QC	QC	87.6	63	51.1
10102	6.33881	5411405	0.09	2	QC	-2	5.12	19	38	6821	14.1	QC	QC	123.31	72	47.25
10103	6.330356	5410399	0.04	2.7	QC	-2	2.21	8	22	1742	11.1	QC	QC	45.72	52	65.74
10104	6.333504	5408939	0.07	3.3	QC	-2	2.85	15	54	4755	18.9	QC	QC	88.9	51	50.53
10105	6.327228	5408591	0.04	2.2	QC	-2	1.92	9	37	1918	14.6	QC	QC	60.31	43	54.57
10106	6.324454	5408147	0.04	2.2	QC	-2	1.32	8	32	1460	13.4	QC	QC	41.88	40	53.35
10107	6.318579	5408452	0.1	2.3	INF	-2	7.45	16	50	5834	17.1	INF	INF	121.8	74	61.52
10108	6.316674	5408983	0.03	1.9	QC	-2	2.64	8	24	1495	21.2	QC	QC	33.67	41	67.39
10109	6.32043	5407493	0.06	2.1	QC	-2	3.46	10	27	3089	16.1	QC	QC	66.68	45	54.17
10110	6.340866	5409666.8	0.06	1.7	QC	-2	3.32	10	38	2646	12.8	QC	QC	103.09	45	61.15
10111	6.347866	5408690	0.06	2.4	QC	-2	3.32	11	39	3139	12.8	QC	QC	69.9	59	61.25
10112	6.367723	5408639.39	0.03	2.4	QC	-2	2.64	9	13	2274	10.6	QC	QC	66.06	30	59.12
10113	6.364452	5408787.3	0.1	2.2	QC	-2	3.9	13	29	6489	12.3	QC	QC	104.1	77	50.09
10114	6.357468	5408629.03	0.05	1.9	QC	-2	1.96	14	29	2163	14.3	QC	QC	102.67	37	42.69
10115	6.365112	5407139.9	0.12	2.6	QC	-2	5.21	18	35	6802	13.7	QC	QC	123.4	80	55.89
10116	6.368007	5407446.5	0.05	2.9	QC	-2	4.59	13	19	4920	12.2	QC	QC	85.35	69	55.7
10117	6.362239	5408647.0	0.05	3	INF	-2	2.72	9	20	3074	8.2	INF	INF	51.58	61	58.37
10118	6.347447	5405779.1	0.07	1.9	QC	-2	4.32	21	28	7179	11.1	QC	QC	111.36	59	35.71
10119	6.378271	5405529.0	0.1	1.8	QC	-2	8.77	21	37	11122	12.1	QC	QC	147.36	83	40.79
10120	6.372683	5405132.3	<0.02	2.4	QC	-2	1.52	8	30	3172	8.9	QC	QC	25.6	45	60.26
10121	6.356605	5404685.0	0.04	2.6	INF	-2	1.26	8	20	1703	6.7	INF	INF	28.09	54	75.13
10122	6.350118	5403938.5	0.03	3.8	INF	-2	1.53	9	20	1818	15.1	INF	INF	23.6	71	83.53
10123	6.33941	5403127.7	0.02	3.2	INF	-2	2.5	6	13	1945	12.6	INF	INF	22.9	41	82.36
10124	6.325831	5403555.5	0.1	3.6	QC	-2	5.28	26	29	10205	18.1	QC	QC	111.57	81	36.76
10125	6.334064	5402167.7	0.03	2.2	INF	-2	1.89	7	19	2287	9.5	INF	INF	37.71	53	77.09
10126	6.322275	5402302.2	0.03	1.9	INF	-2	1.9	9	21	1598	10.8	INF	INF	26.66	67	76.57
10127	6.314647	5401507.7	0.05	2.2	QC	-2	2.57	11	46	3175	18.4	QC	QC	69.48	42	60.61
10128	6.302216	5386788.0	0.04	1.5	QC	-2	0.9	11	18	1831	11.0	QC	QC	510.03	22	28.64
10129	6.328681	5387354.0	0.1	2.3	QC	-2	3.57	12	22	2304	12.4	QC	QC	293.17	46	46.85
10130	6.34412	5387508.0	0.16	1.9	QC	-2	4.14	17	16	5439	15.1	QC	QC	245.38	41	45.25
10131	6.359802	5387324.0	0.07	2.1	QC	-2	4.98	13	13	2590	16.0	QC	QC	1998.25	60	42.67
10132	6.372467	5386787.7	0.04	1.3	QC	-2	1.23	10	41	2618	8.1	QC	QC	97.33	25	19.72
10133	6.352077	5384937.7	0.11	3	QC	-2	4.69	14	47	4017	13.2	QC	QC	222.86	53	43.45
10134	6.346441	5384586.0	0.11	2.5	QC	-2	8.62	19	20	6350	14.8	QC	QC	289.22	69	45.29
10135	6.349829	5386416.0	0.36	2.2	QC	-2	8.43	18	20	22245	10.9	QC	QC	3258.17	59	55.9
10136	6.349833	5388883.0	0.06	1.3	QC	-2	4.33	17	10	6677	9.7	QC	QC	191.13	38	25.82
10137	6.37489.2	5389986.	0.14	3.1	QC	-2	7.95	< 19	13	14983.2	11.1	QC	QC	170	55	50.5
10138	6.375577	5390949	0.03	1.4	QC	-2	3.75	14	11	5514	10.5	QC	QC	59.88	37	16.79
10139	6.375223	5392745	0.1	2.1	QC	-2	5.14	21	32	4120	24.4	QC	QC	165.76	77	59.5
10140	6.36.748	5392177	0.12	2.1	QC	-2	3.79	19	48	4248	21.8	QC	QC	158.83	53	54.47
10141	6402499	5392508	0.17	1.9	QC	-2	7.47	41	35	5607	22.2	QC	QC	220.32	67	50.66
10142	641571	5392073	0.11	2.1	QC	-2	3.63	19	47	5921	12.9	QC	QC	282.77	40	42.87
10143	642017	5392818	0.12	1.8	INF	-2	1.75	9	21	2839	8.0	INF	INF	40.15	157	81.17
10144	641483	5393576	0.09	3.3	QC	-2	3.76	21	39	6287	15.9	QC	QC	190.06	40	42.6
10145	639843	5394311	0.12	1.7	QC	-2	2.68	14	37	2581	15.6	QC	QC	101.01	51	58.72
10146	639523	5394027	0.09	2.2	QC	-2	2.68	11	29	3401	12.0	QC	QC	121.03	49	49.72
10147	6403872	5395298	0.11	2	QC	-2	4.14	12	40	2503	20.9	QC	QC	190.18	42	46.72
10148	6403641	5396517	0.05	1.7	QC	-2	2.83	15	33	3376	12.3	QC	QC	185.15	33	34.25
10149	6421489	5396553	0.1	2.1	QC	-2	5.28	16	42	3947	18.6	QC	QC	240.8	65	50.95
10150	6410607	5397280	0.09	1.5	QC	-2	7.68	19	41	4149	21.5	QC	QC	325.66	51	53.76
10151	6428279	5397830	0.12	2.2	QC	-2	8.79	21	42	7477	21.4	QC	QC	214.11	68	68.77
10152	643.2996	5400899	0.04	1.8	QC	-2	1.94	10	26	1660	17.1	QC	QC	68.1	69	57.66
10153	642247	5400856.3	0.03	2.4	INF	-2	1.53	9	14	2259	9.8	INF	INF	28.63	77	79.15
10154	646.5981	5400805.4	0.13	1.7	QC	-2	3.76	13	95	2370	33.0	QC	QC	174.38	78	41.79
10155	645.5777	5399815	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
10156	645.5271	5399832	0.21	4.2	INF	-2	6.49	21	69	7928	22.2	INF	INF	217.72	87	53.11
10157	645.4665	5399856	0.05	3.4	QC	-2	0.86	20	58	6489	19.5	QC	QC	171.79	109	53.5
10158	645.5035	5399.6483	0.07	5.8	INF	-2	2.76	15	130	5136	24.7	INF	INF	57.96	77	74.63
10159	645.5727	5398.1086	0.11	1.4	QC	-2	4.28	11	41	2583	14.2	QC	QC	97.12	53	62.31
10170	646.647	5397979	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
10171	646.7275	5398.7919	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Site	Easting WGS 27 UTM Zone 16	Northing Method ------> Units ------> Dr. L ------>	Ag ICP-MS ppm 0.02	Au INAA ppm 0.5	Au FA ppb 0.9	Au INAA ppb 2	Co ICP-MS ppm 0.05	Cr ICP-OES ppm 4	Cu ICP-OES ppm 5	Fe ICP-OES ppm 5	Ni ICP-MS ppm 0.5	Pd FA ppb 0.9	Pt FA ppb 0.5	Total REEs La to Lu	Zn ICP-OES ppm 2	LOI Grav. % 0.01
10072	6486.256	5398892?	N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D
10073	6486.710	5398.068	0.06	5.2	QC	-2	2.79	17	20	74870	19.5	QC	QC	66.46	60	58.80
10074	6486.116	5398.368	0.08	2.1	DNF	-2	5.32	13	17	46954	10.0	DNF	DNF	27.76	1361	90.2
10075	6486.379	5398.077	0.08	DNF	DNF	DNF	1.03	6	103	15987	5.2	DNF	DNF	17.2	87	95.07
10076	6486.76	5395.383	0.09	3.6	QC	-2	4.76	29	33	86299	16.6	QC	QC	179.89	76	58.62
10077	6.388866	5395.881	0.09	1.7	QC	-2	4.36	19	29	71117	17.1	QC	QC	232.42	52	68.3
10078	6.35912	5393.983	0.13	1.9	QC	-2	6.23	36	42	80772	16.2	QC	QC	420.02	67	68.39
10079	6.386886	5393.956	0.1	2.1	QC	-2	5.02	28	29	57987	16.3	QC	QC	317.39	73	66.7
10080	6.357486	5392.807	0.16	1.9	DNF	-2	4.76	17	29	61064	18.2	DNF	DNF	305.79	73	59.66
10081	6.356803	5392.128	N/D	1.7	DNF	-2	N/D	N/D	N/D	N/D	N/D	DNF	DNF	N/D	N/D	N/D
10082	6.33276	5392.955	0.08	2.5	QC	-2	6.93	18	26	62080	18.9	QC	QC	270.3	66	58.79
10083	6.336882	5393.026	0.11	2.9	QC	-2	4.9	15	27	54150	13.6	QC	QC	266.36	76	57.95
10084	6.33712	5393.697	0.29	2.3	QC	-2	3.79	13	44	61164	14.1	QC	QC	272.87	69	56.45
10085	6.336.59	5394.624	0.12	1.9	DNF	-2	4.47	19	29	67017	12.6	DNF	DNF	26.2.79	61	62.82
10086	6.327.01	5394.110	0.1	2.2	QC	-2	5.23	17	29	71464	13.6	QC	QC	211.59	67	52.56
10087	6.33.266	5395.676	0.11	2.9	QC	-2	5.69	17	29	67170	17.01	QC	QC	272.87	73	55.26
10088	6.33.250	5396.261	0.23	1.9	QC	-2	6.59	23	40	116469	16.2	QC	QC	340.85	97	59.16
10089	6.310.93	5392.107	0.08	1.8	QC	-2	4.91	17	23	62.20	9.9	QC	QC	250.56	73	57.07
10090	6.312.76	5393.713	0.1	1.5	QC	-2	3.76	13	13	54001	12.2	QC	QC	156.87	60	61.45
10091	6.310.08	5390.567	0.16	1.6	QC	-2	5.27	27	29	86071	12.2	QC	QC	366.6	73	58.55
10092	6.302.09	5390.865	0.09	2	QC	-2	4.61	15	22	74867	13.01	QC	QC	416.72	63	53.13
10093	6.266.77	5392.970	0.12	3.7	QC	-2	4.62	26	23	111770	12.6	QC	QC	191.95	79	58.75
10094	6.27172	5393.968	0.09	1.8	DNF	-2	1.95	9	16	19995	7.01	DNF	DNF	75.07	97	95.32
10095	6.299.70	5388.787	0.13	2.6	QC	-2	7.72	13	42	20866	9.1	QC	QC	6000.81	70	38.61
10096	6.29813	5390.872	0.1	2.1	QC	-2	4.56	14	23	20696	11.9	QC	QC	3000.37	58	56.76
10097	6.28.76	5391.636	0.13	1.5	QC	-2	2.35	14	25	20.31	9.5	QC	QC	6.70.21	37	33.08
10098	6.28663	5391.085	0.1	1.7	QC	-2	3.33	16	28	4771	9.6	QC	QC	600.79	47	52.76
10099	6.29.760	5391.976	0.27	3	QC	-2	7.39	28	41	106864	12.9	QC	QC	6.70.99	78	56.76
10100	6.310.21	5390.583	0.09	1.6	QC	-2	5.58	14	20	55965	11.7	QC	QC	266.12	56	57.80
10101	6.311.60	5393.893	0.09	2.3	QC	-2	4.03	17	27	53001	16.6	QC	QC	203.26	71	65.11
10102	6.306.09	5393.521	0.09	2.6	QC	-2	6.26	16	27	5702	14.6	QC	QC	310.36	68	61.62
10103	6.308.86	5393.157	0.13	2.2	QC	-2	7.66	14	41	20113	13.01	QC	QC	307.26	90	67.16
10104	6.308.13	5393.832	0.16	1.9	DNF	-2	4.16	17	36	5975	9.7	DNF	DNF	278.72	67	61.23
10105	6.29.03	5393.256	0.23	2.6	QC	-2	5.8	17	33	2661	11.6	QC	QC	6050.67	70	53.87
10106	6.31.103	5393.827	0.16	2.6	QC	-2	9.46	28	33	11779	12.3	QC	QC	7030.77	97	63.83
10107	6.34.37	5393.099	0.23	2.6	DNF	-2	4.77	23	50	36.03	15.6	DNF	DNF	3493.26	69	64.86
10108	6.366.09	5397.086	0.1	2.5	QC	-2	3.37	12	34	23.05	13.9	QC	QC	150.63	63	57.11
10109	6.348.19	5396.826	0.07	1.6	QC	-2	3.36	16	32	19699	15.3	QC	QC	151.96	60	63.27
11101	6.33.866	5396.866	0.09	2.3	QC	-2	2.23	13	33	2.38.7	7.1	QC	QC	150.09	50	53.85
11111	6.34.893	5397.053	0.12	1.9	QC	-2	3.62	16	30	31.27	9.9	QC	QC	200.36	56	63.23
11112	6.34.861	5397.763	0.12	3.6	DNF	-2	2.3	13	27	2.987	8.6	DNF	DNF	214.36	40	60.16
11113	6.349.83	5395.114	0.09	1.6	QC	-2	1.66	9	32	21.09	10.99	QC	QC	211.63	32	63.72
11114	6.35.703	5395.013	0.09	2.1	QC	-2	2.26	12	36	3.46.7	12.05	QC	QC	260.73	58	53.73
11115	6.35.116	5396.693	0.13	1.6	QC	-2	2.99	13	33	30.79	13.01	QC	QC	411.62	37	63.92
11116	6.37.629	5397.806	0.12	3.3	QC	-2	2.72	17	98	39.88	11.9	QC	QC	1.29.53	54	53.72
11117	6.37.137	5398.936	0.09	3	QC	-2	3.51	22	33	9.2.96	17.2	QC	QC	1066.3	46	72.63
11118	6.37.210	5398.936	0.13	1.8	QC	-2	4.46	26	33	10.2.03	12.5	QC	QC	286.47	77	55.91
11119	6.366.73	5400.066	0.07	2.2	QC	-2	3.03	14	30	2.27.7	11.3	QC	QC	153.36	29	59.66
11120	6.33.137	5400.930	0.07	2.1	DNF	-2	3.66	14	41	3.25.6	16.95	DNF	DNF	82.2	60	58.76
11121	6.33.611	5399.827	0.13	4.9	QC	-2	7.76	38	49	1.70.0.7	18.6	QC	QC	131.82	76	38.29
11122	6.33.664	5399.617	0.1	6	QC	-2	6.63	27	39	16.61.6	16.7	QC	QC	136.07	72	23.07
11123	6.33.664	5399.639	N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D
11124	6.308.63	5399.036	N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D
11125	6.304.60	5399.906.7	-0.02	1.9	QC	-2	1.07	9	23	2.2.56	8.5	QC	QC	10.13	46	54.29
11126	6.307.76	5397.909	N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D
11127	6.295.60	5396.863	0.1	3.6	QC	-2	4.9	23	37	76.0.3	12.7	QC	QC	256.63	76	61
11128	6.277.16	5398.366	N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D
11129	6.276.60	5399.246	0.07	4.6	DNF	-2	2.72	29	36	4.78.7	16.5	DNF	DNF	35.42	73	68.97
11130	6.276.33	5400.077	0.07	2.6	QC	-2	4.67	23	29	6.26.0	12.05	QC	QC	1686.13	67	50.23
11131	6.267.67	5400.103	0.06	1.9	QC	-2	1.59	12	61	1.70.3	12.95	QC	QC	1.20.66	39	71.56
11132	6.276.96	5399.557	0.06	2.1	DNF	-2	1.63	6	13	21.35	7.6	DNF	DNF	28.73	72	67.76
11133	6.271.99	5399.589	0.02	3.9	QC	-2	1.71	9	19	6.60.1	7.9	QC	QC	19.22	21	19.23
11134	6.275.60	5399.86.?	0.09	2.7	QC	-2	5.16	29	33	11.0.65	13.6	QC	QC	153.8	71	56.21

Site	Easting	Northing	Ag	As	Au	Au	Co	Cr	Cu	Fe	Ni	Pd	Pt	Total	Zn	LOI
			ICP-MS	ICP-MS	Fire Assay	ICP-MS	ICP-MS	ICP-MS	ICP-MS	ICP-MS	ICP-MS	Fire Assay	Fire Assay		ICP-MS	Gravimetric
			ppm	ppm	ppb	ppb	ppm	ppm	ppm	ppm	ppm	ppb	ppb		ppm	%
			0.02	0.2	0.5	1	0.05	1	0.5	0.01	0.2	0.5	0.5	0.01	2	0.05

Site	Easting Grid (E UTM Zone 18	Northing Method ——> Field ——> Dry Lab ——>	Ag ICP-MS ppm 0.02	As (Aqua ppm 0.2	Au Fire ppb 0.5	Au (Aqua ppb 2	Co ICP-MS ppm 0.05	Cr ICP-OES ppm 5	Cu ICP-OES ppm 5	Fe ICP-OES % 0.01	Ni ICP-MS ppm 0.2	Pd Fire ppb 0.5	Pt Fire ppb 0.2	Total Combustion 0.1	Zn ICP-OES ppm 5	LOI Gravimetric % 0.01
1	0	0	0.1	2.8	QC	2	5.26	141	21	0.0103	11.9	QC	QC	1.79	67	68.01
2	0	0	0.07	2.9	INF	2	1.99	121	61	0.0088	13.5	INF	INF	0.9	71	69.01
3	0	0	0.1	2	QC	2	5.26	141	102	0.0114	13.8	QC	QC	2.01	75	69.27
4	0	0	0.1	1.9	INF	2	1.62	121	226	0.0087	9.6	INF	INF	0.55	56	69.25
5	0	0	0.07	2.2	INF	2	1.9	91	168	0.0101	9.5	INF	INF	0.78	66	69.01
6	0	0	0.16	7.6	QC	2	1.55	91	101	0.0156	8.5	QC	QC	0.11	52	69.79
7	0	0	0.07	2.3	QC	2	2.09	121	61	0.0109	7.6	QC	QC	0.63	65	68.98
8	0	0	0.07	1.9	QC	2	2.02	121	71	0.0122	10.6	QC	QC	0.66	75	69.1
9	0	0	0.16	6.7	QC	2	6.93	196	351	0.0169	13.7	QC	QC	0.78	87	69.79
10	0	0	0.1	2.8	4.8	2	6.52	211	351	0.0129	12.8	4.8	1.79	2.86	67	71.61
11	0	0	0.1	1.2	1.16	2	6.59	236	351	0.71	27.6	4.8	0.71	0.27	59	73.7
12	0	0	0.05	2.1	4.8	2	5.11	166	251	0.650	19.2	4.8	1.82	2.29	62	67.91
13	0	0	0.07	3.1	INF	2	8.13	256	81	0.0302	19.6	INF	INF	0.16	69	69.75
14	0	0	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS
15	0	0	0.16	2.8	4.8	2	5.26	171	381	26.26	17.7	4.8	0.77	2.96	59	59.1
16	0	0	0.1	11	4.8	2	7.7	271	1061	2.0409	17.9	5.36	1.39	2.11	84	72.73
17	0	0	0.1	4	4.8	2	2.68	231	251	1.0879	17.9	4.8	0.59	1.03	73	67.83
18	0	0	0.07	3.2	INF	2	3.7	171	261	0.0211	19.2	INF	INF	0.25	77	68.07
19	0	0	0.05	4.1	4.8	2	5.03	171	211	0.0221	19.2	4.8	2.63	0.49	79	73.19
20	0	0	0.05	2.3	INF	2	3.32	91	121	0.0176	9.6	INF	INF	0.21	59	70.27
21	0	0	0.05	2.2	4.8	2	3.32	101	171	0.0227	9.61	4.8	2.38	0.78	59	68.14
22	0	0	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS
23	0	0	0.05	1.7	4.8	2	2.85	171	171	0.0221	9.2	4.8	0.8	0.49	59	72.11
24	0	0	0.1	3.1	INF	2	7.62	261	321	0.0281	19.1	INF	INF	0.23	89	69.46
25	0	0	0.05	3.7	INF	2	3.29	171	271	0.0169	19.6	INF	INF	0.61	86	68.91
26	0	0	0.05	3.3	4.8	2	2.73	131	391	0.0057	13.1	4.8	1.29	0.17	91	68.39
27	0	0	0.1	1.7	4.8	2	9.56	231	71	0.0306	19.2	4.8	0.36	0.23	69	70.2
28	0	0	0.05	2.1	4.8	2	6.35	111	761	0.0317	10.1	4.8	0.39	0.21	66	67.91
29	0	0	0.1	7.6	INF	2	9.34	231	661	0.0468	19.2	INF	INF	0.23	93	68.27
30	0	0	0.07	2.6	INF	2	4.67	111	391	0.0169	9.6	INF	INF	0.61	72	68.05
31	0	0	0.16	2.3	4.8	2	8.22	271	191	0.0304	19.1	4.8	1.32	0.31	71	73.14
32	0	0	0.05	2	4.8	2	1.695	61	211	0.0316	19.61	4.8	0.68	0.27	57	67.15
33	0	0	0.05	4.1	INF	2	5.72	161	1161	0.0617	15.6	INF	INF	0.27	69	72.39
34	0	0	0.1	3.6	INF	2	1.83	91	1.29	0.0227	17.6	INF	INF	0.63	99	68.81
35	0	0	0.16	2.6	4.8	2	2.36	171	781	0.0281	19.61	4.8	0.77	0.62	67	70.83
36	0	0	0.05	2.1	INF	2	6.3	91	331	0.0272	9.2	INF	INF	0.67	71	68.11
37	0	0	0.1	1.1	4.8	2	2.69	161	181	0.0215	8.6	4.8	2.45	0.77	53	72.29
38	0	0	0.05	2	INF	2	2.8	191	661	0.0261	12.6	INF	INF	0.33	86	72.05
39	0	0	0.07	3.9	INF	2	4.13	71	191	0.0181	19.5	INF	INF	0.71	91	69.83
40	0	0	0.2	INF	INF	INF	1.39	61	131	0.771	19.6	INF	INF	0.91	77	69.39
41	0	0	0.05	2.6	INF	2	2.66	131	71	0.0179	19.6	INF	INF	0.5	71	67.19
42	0	0	0.05	4.1	INF	2	2.27	161	231	0.0186	19.6	INF	INF	0.16	1188	68.83
43	0	0	0.07	6.6	INF	2	2.8	231	551	0.0169	19.6	INF	INF	0.16	69	67.19
44	0	0	0.1	6.6	4.8	2	5.65	291	1161	0.0672	19.1	4.8	1.61	0.23	93	70.61
45	0	0	0.1	1	4.8	2	5.08	161	81	0.0163	13.61	4.8	4.8	0.79	67	67.87
46	0	0	0.1	1.7	4.8	2	6.63	221	611	0.0603	13.6	4.8	0.49	0.61	61	72.65
47	0	0	0.16	1.8	4.8	2	7.82	131	991	0.0272	19.1	4.8	0.47	2.79	59	72.73
48	0	0	0.05	2.1	4.8	2	0.79	161	141	0.0139	19.1	4.8	4.8	0.65	59	67.06
49	0	0	0.05	1.6	4.8	2	1.87	101	621	0.0211	13.1	4.8	0.77	0.39	69	68.63
50	0	0	0.1	2.1	4.8	2	6.69	231	861	0.0302	13.1	4.8	1.79	1.03	87	68.13
51	0	0	0.1	3.1	4.8	2	5.65	271	691	0.0366	13.5	4.8	0.56	0.23	76	68.45
52	0	0	0.16	3.1	4.8	2	1.79	91	371	0.0202	9.2	4.8	0.33	0.39	51	67.87
53	0	0	0.07	3.3	4.8	2	1.29	91	251	0.0181	9.2	4.8	4.8	0.37	56	70.47
54	0	0	0.16	3.6	4.8	2	1.3	71	671	0.0279	9.2	4.8	0.65	0.13	52	71.16
55	0	0	0.1	1	4.8	2	0.11	111	81	0.0176	19.6	4.8	0.71	0.29	53	67.69
56	0	0	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS
57	0	0	0.05	2	4.8	2	5.26	171	441	0.0272	9.2	4.8	0.39	2.11	66	69.09
58	0	0	0.05	1.9	4.8	2	2.83	231	81	0.0169	13.5	4.8	0.43	2.03	56	68.13
59	0	0	0.1	1.3	4.8	2	2.58	111	211	0.0261	13.6	4.8	4.8	0.15	67	71.89
60	0	0	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS
61	0	0	0.1	1.9	4.8	2	66.67	351	351	1.1006	27.6	4.8	0.77	3.86	129	69.56
62	0	0	0.1	1.8	INF	2	5.41	161	151	0.0211	9.2	INF	INF	0.67	69	69.45
63	0	0	0.1	1.7	4.8	2	5.08	181	341	0.0187	13.61	4.8	0.25	2.29	55	68.03

Site	Easting	Northing	Ag	As	Au	Au	Co	Cr	Cu	Fe	Ni	Pd	Pt	Total	Zn	LOI
	NAD 27	Method----->	ICP-MS	INAA	FA	INAA	ICP-MS	ICP-OES	ICP-OES	ICP-OES	ICP-MS	FA	FA	REEs	ICP-OES	Grav.
	UTM Zone 16	Units----->	ppm	ppm	ppb	ppb	ppm	ppm	ppm	ppm	ppm	ppb	ppb	La to Lu	ppm	%
		D. L.----->	0.02	0.5	0.9	2	0.05	4	5	5	0.5	0.9	0.5		2	0.05
1261	621396	5391174	0.15	2.2	-0.9	-2	6.52	22	33	6658	13.4	-0.9	-0.5	324.89	57	41.86
1262	617031	5393384	0.06	2.1	-0.9	-2	3.54	10	42	2160	11.3	-0.9	-0.5	97.32	47	49.96
1263	614000	5395125	0.05	INF	INF	INF	2.24	12	13	4301	6.2	INF	INF	33.87	41	67
1264	613344	5398458	0.08	2.1	-0.9	-2	2.58	14	29	4851	9.9	-0.9	-0.5	125.11	45	54.83
1265	612821	5402503	0.1	2.7	-0.9	-2	4.66	22	37	8414	12.1	-0.9	1.13	134.85	65	36.46
1266	614012	5404107	0.09	4.5	INF	-2	3.8	25	58	9786	18.8	INF	INF	72.91	66	45.34
1267	614646	5407012	0.07	2.8	-0.9	-2	4.17	15	33	7958	11.3	-0.9	0.52	65.22	87	59.35
1268	614228	5407417	0.05	3.7	-0.9	-2	2.9	15	24	5500	13.0	-0.9	-0.5	53.71	63	51.49
1269	614854	5407441	0.03	3.7	-0.9	-2	1.67	9	15	4923	10.2	-0.9	-0.5	32.65	87	64
1270	617775	5407740	0.04	2.4	INF	-2	1.56	6	19	1537	10.7	INF	INF	22.04	62	74.9
1271	617880	5410388	0.06	4.7	INF	-2	5.08	23	30	9773	15.4	INF	INF	53.2	69	52.96
1272	617539	5413845	0.05	2.3	INF	-2	2.11	16	24	3857	9.6	INF	INF	28.45	98	66.75
1273	617592	5413408	0.07	2.4	-0.9	-2	4.57	25	27	10346	12.4	-0.9	0.64	108.16	60	32.84
1274	616855	5413723	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1275	616783	5413307	0.06	4.2	-0.9	-2	4.37	25	43	8335	16.7	-0.9	-0.5	66.75	70	47.19
1276	616430	5413300	0.06	4.7	INF	-2	2.77	14	57	5013	12.0	INF	INF	53.22	74	61.84
1277	617247	5412588	0.07	5.7	INF	-2	5.09	26	34	11740	16.4	INF	INF	72.52	69	55.59
1278	616888	5412687	0.06	1.5	INF	-2	1.81	9	12	2807	6.5	INF	INF	25.15	98	73.91
1279	616247	5412682	0.07	2.9	-0.9	-2	7.27	29	27	25172	14.0	-0.9	0.72	124.77	74	22.26
1280	615288	5412152	0.03	2.3	-0.9	-2	5.02	17	10	13477	7.1	-0.9	0.75	61.36	33	5.5
1281	617275	5411815	0.07	3.6	-0.9	-2	5.83	37	23	21964	16.2	-0.9	0.55	92.75	65	35.17
1282	618131	5410999	0.05	1.9	INF	-2	1.41	9	18	2255	6.7	INF	INF	29.05	65	77.83
1283	617068	5409818	0.08	7.1	INF	-2	5.5	30	52	12579	17.5	INF	INF	69.5	81	54.68
1284	616621	5408924	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1285	616258	5409039	0.02	6.5	-0.9	-2	5.27	14	91	8908	10.0	-0.9	0.85	41.81	50	41.12
1286	616116	5408172	0.08	5.7	INF	-2	3.42	16	31	22765	10.0	INF	INF	81.63	93	73.27
1287	615637	5407963	0.03	5.6	INF	-2	2.4	5	6	3342	5.8	INF	INF	14.78	150	85
1288	615686	5407140	0.03	3.7	INF	-2	1.28	7	31	3814	5.2	INF	INF	26.03	38	73.29
1289	615461	5406337	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1290	615386	5405095	0.08	INF	INF	INF	3.89	15	83	14254	11.9	INF	INF	50.92	73	75.07
1291	614769	5404457	0.06	4.1	INF	-2	2.18	12	29	4842	9.3	INF	INF	35.12	57	72.7
1292	614695	5403516	0.08	5.2	INF	-2	2.48	13	70	6970	16.7	INF	INF	56.13	63	65.56
1293	615320	5403495	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1294	614627	5402383	0.05	4.3	INF	-2	1.63	6	17	8472	6.8	INF	INF	25.23	69	76.45
1295	614125	5401755	0.06	2.2	-0.9	-2	4.89	18	30	8065	12.6	-0.9	1.03	127.57	51	35.31
1296	612852	5400859	0.11	2.6	INF	-2	5.54	26	43	7095	17.7	INF	INF	164.15	69	41.03
1297	612518	5400591	0.12	2.5	-0.9	-2	5.48	14	63	4310	18.7	-0.9	0.85	160.02	64	62.45
1298	612471	5399685	0.1	2	-0.9	-2	4.7	20	30	6950	13.2	-0.9	0.61	111.05	71	49.33
1299	613484	5399100	0.1	3.2	-0.9	-2	2.26	8	66	3065	17.2	-0.9	0.59	272.45	51	58.74
1300	612248	5398627	0.04	1.9	-0.9	-2	2.6	11	36	2791	13.8	-0.9	0.95	80.72	44	56.35
1301	613443	5397255	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1302	614081	5396362	0.08	2.6	-0.9	-2	3.79	25	61	8962	13.0	-0.9	0.54	142.9	34	40.01
1303	618658	5391697	0.12	2.9	-0.9	-2	1.66	11	108	3822	7.9	-0.9	-0.5	127.05	31	48.78
1304	618553	5391387	0.11	3.4	-0.9	-2	2.28	12	83	4140	7.9	-0.9	-0.5	146.13	39	46.64
1305	617774	5391041	0.1	2.8	-0.9	-2	5.87	20	51	7285	11.5	-0.9	0.7	191.58	81	50.44
1306	617034	5389941	0.19	5.3	-0.9	-2	5.5	16	41	8299	16.5	-0.9	-0.5	205.79	66	53.06
1307	615679	5390595	0.04	1.3	-0.9	-2	4.07	8	25	1805	10.0	-0.9	-0.5	101.93	38	48.11
1308	614992	5390817	0.09	1.6	-0.9	-2	3.54	8	35	1797	6.6	-0.9	0.8	117.42	40	53.01
1309	613556	5393145	0.13	2.5	-0.9	-2	3.23	10	129	6839	12.6	-0.9	0.69	105.48	73	66.38
1310	613971	5394273	0.07	2.8	-0.9	-2	2.64	16	39	7541	7.5	-0.9	0.61	163.41	37	44.9
1311	613543	5394142	0.06	2.8	INF	-2	2.8	16	34	5865	11.5	INF	INF	68.76	39	49.92
1312	612775	5393896	0.15	4.5	-0.9	-2	5.7	23	48	12086	12.5	-0.9	0.68	144.92	75	44.02
1313	611986	5393680	0.07	12	INF	-2	6.16	30	64	16639	15.3	INF	INF	119.65	96	64.25
1314	620031	5391268	0.13	3.8	-0.9	-2	6.6	20	73	8643	9.4	-0.9	-0.5	266.05	75	41.48
1315	621653	5390636	0.1	-0.5	-0.9	-2	3.06	9	18	2136	11.6	-0.9	-0.5	211.95	56	48.84
1316	622720	5384968	0.12	4.3	-0.9	-2	3.16	12	35	5617	8.0	-0.9	-0.5	154.57	56	48.09
1317	622541	5385433	0.08	2.8	-0.9	-2	2.11	11	28	4527	8.4	-0.9	-0.5	162.8	40	42.96
1318	621050	5385470	0.11	6.1	-0.9	-2	3.4	11	40	6737	10.2	-0.9	-0.5	112.56	67	57.97
1319	621128	5387333	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1320	620643	5386749	0.08	3.3	INF	-2	2.18	17	39	6817	10.8	INF	INF	128.57	41	49.88
1321	615264	5393427	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1322	614045	5396350	0.06	1.6	-0.9	-2	3.18	18	32	7338	8.6	-0.9	-0.5	107.51	25	24.75
1323	613473	5396458	0.09	3.4	1.64	-2	5.18	26	40	13898	12.5	-0.9	0.87	116.05	59	23.86

Site	Easting	Northing	Ag	As	Au	Au	Co	Cr	Cu	Fe	Ni	Pd	Pt	Total	Zn	LOI
	NAD 27	Method----->	ICP-MS	INAA	FA	INAA	ICP-MS	ICP-OES	ICP-OES	ICP-OES	ICP-MS	FA	FA	REEs	ICP-OES	Grav.
	UTM Zone 16	Units----->	ppm	ppm	ppb	ppb	ppm	ppm	ppm	ppm	ppm	ppb	ppb	La to Lu	ppm	%
		D. L.----->	0.02	0.5	0.9	2	0.05	4	5	5	0.5	0.9	0.5		2	0.05
1324	611928	5397571	0.12	2.5	INF	-2	3.56	14	32	5802	11.8	INF	INF	127.12	65	68.43
1325	613922	5405417	0.07	3.8	-0.9	-2	6.2	28	38	14552	17.0	-0.9	-0.5	101.85	73	35.32
1326	612813	5404319	0.12	6.4	3.07	-2	7.2	29	55	14581	18.8	-0.9	1.61	134.29	106	45.9
1327	612080	5403259	0.12	6.7	-0.9	-2	5.8	27	44	12546	17.0	-0.9	-0.5	122.42	103	44.08
1328	613769	5406464	0.04	4.3	INF	-2	1.18	-4	15	1311	9.1	INF	INF	16.77	56	86.18
1329	612830	5407640	0.03	2.4	INF	-2	1.81	7	13	2248	10.4	INF	INF	23.95	77	80.22
1330	614722	5410775	0.05	3.5	-0.9	-2	3.37	14	20	5326	15.3	-0.9	-0.5	65.54	53	48.02
1331	614364	5411063	0.04	3.2	-0.9	-2	3.76	19	19	7583	13.5	-0.9	-0.5	67.73	49	38.44
1332	613948	5411649	0.05	5.6	INF	-2	2.48	15	28	3477	8.9	INF	INF	90.04	59	75.77
1333	613217	5414453	0.09	3.7	-0.9	-2	6.8	32	29	17398	21.6	-0.9	0.89	140.59	71	29.55
1334	612959	5414948	0.04	1.8	-0.9	-2	5.14	21	15	11414	14.0	-0.9	-0.5	62.79	54	25.74
1335	611751	5415031	0.07	3.8	INF	-2	5.48	24	24	15370	18.1	INF	INF	62.33	108	55.64
1336	610314	5415244	0.06	4.5	INF	-2	2.34	10	18	7700	9.1	INF	INF	29.39	77	70.58
1337	610776	5414592	0.06	6.6	INF	-2	2.04	10	18	9229	8.6	INF	INF	26.83	60	76.19
1338	610211	5414281	0.04	2.8	INF	-2	1.12	5	10	2759	5.8	INF	INF	17.29	68	77.87
1339	612432	5414210	0.06	1.5	-0.9	-2	4.81	21	13	12294	12.6	-0.9	1.68	70.19	43	18.43
1340	611743	5414009	0.05	1.8	-0.9	-2	3.93	18	9	9596	9.9	-0.9	-0.5	70.35	31	12.49
1341	611456	5414108	0.03	1	-0.9	-2	2.96	16	6	8049	7.2	-0.9	-0.5	57.11	24	4.12
1342	612405	5413226	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1343	612349	5411875	0.09	5.8	INF	-2	2.03	11	25	4590	10.0	INF	INF	43.64	86	63.98
1344	610686	5412503	0.07	1.9	-0.9	-2	3.17	14	26	4139	11.5	-0.9	-0.5	96.82	47	48.33
1345	609934	5411985	0.08	2.2	-0.9	-2	5.54	23	15	20431	10.8	-0.9	-0.5	115.29	47	10.66
1346	610253	5411112	0.04	1.8	-0.9	-2	2.9	16	14	6236	7.3	-0.9	-0.5	61.09	34	15.94
1347	610271	5410820	0.03	1.2	-0.9	-2	2.33	14	8	6803	5.5	-0.9	-0.5	54.2	23	5.45
1348	611739	5409885	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1349	611023	5408453	0.13	3.8	-0.9	-2	4.73	21	24	9252	14.9	-0.9	-0.5	160.9	54	49.2
1350	610734	5408077	0.07	1.3	-0.9	-2	4.56	13	15	5766	11.1	-0.9	-0.5	109.77	47	42.08
1351	611806	5403919	0.05	INF	INF	INF	1.32	16	14	1792	9.7	INF	INF	17.35	87	82.28
1352	611367	5403704	0.07	3	INF	-2	3.97	16	26	6175	11.6	INF	INF	127.89	54	45.52
1353	611178	5403170	0.05	3.3	-0.9	-2	5.34	26	31	14054	15.7	-0.9	-0.5	79.41	76	36.32
1354	610899	5402644	0.07	4.4	INF	-2	4.25	24	31	10552	15.9	INF	INF	85.26	57	42.37
1355	611376	5398932	0.07	INF	INF	INF	1.9	11	27	2903	10.5	INF	INF	63.53	66	62.11
1356	610696	5398885	0.06	2.9	-0.9	-2	2.93	10	21	3371	9.8	-0.9	-0.5	82.71	72	67.82
1357	610208	5399325	0.14	3.9	INF	-2	6.24	16	50	12485	12.9	INF	INF	140.02	79	61.93
1358	610839	5396630	0.09	3.2	INF	-2	2.88	15	54	3727	12.7	INF	INF	137.38	39	41.3
1359	610722	5395761	0.04	1.8	-0.9	-2	2.84	18	26	6290	8.1	-0.9	-0.5	89.89	30	24.29
1360	610591	5395448	0.09	5.1	-0.9	-2	4.68	21	58	11704	11.8	-0.9	0.56	107.76	66	43.87
1361	615756	5391825	0.15	4.5	-0.9	-2	4.54	23	53	6686	13.8	-0.9	-0.5	192.43	75	42.33
1362	615383	5392578	0.17	3.4	INF	-2	1.39	11	68	3964	8.9	INF	INF	318.37	45	46.35
1363	619595	5389824	0.1	4.1	-0.9	-2	1.99	13	56	4687	8.5	-0.9	-0.5	129.84	46	47.74
1364	619484	5389337	0.08	INF	INF	INF	1.77	9	15	3576	6.2	INF	INF	32.15	98	83.41
1365	618986	5389254	0.07	INF	INF	INF	1.65	8	26	5356	6.4	INF	INF	20.59	75	79.53
1366	619743	5388649	0.1	3.3	-0.9	-2	3.54	21	56	7952	13.2	-0.9	-0.5	149.73	58	45.1
1367	618675	5388605	0.15	5	INF	-2	3.72	28	92	5038	12.6	INF	INF	37.47	93	60.49
1368	618066	5388018	0.17	2.9	INF	-2	3.99	18	83	6400	10.4	INF	INF	72.63	115	67.49
1369	619013	5387050	0.03	3.7	-0.9	-2	3.97	18	48	7316	10.6	-0.9	0.53	63.14	39	10.11
1370	623713	5386177	0.08	2.8	INF	-2	2.21	14	47	3395	9.1	INF	INF	139.48	47	68.96
1371	624631	5385379	0.08	NM	-0.9	NM	8.03	21	26	14022	17.0	-0.9	-0.5	244.92	69	43.59
1372	629545	5378697	0.09	3.1	-0.9	-2	2.13	15	36	5989	11.9	-0.9	0.9	138.23	49	51.19
1373	635566	5377629	0.05	2.3	-0.9	-2	3.06	18	23	7781	7.8	-0.9	-0.5	92.81	35	19.39
1374	638615	5378310	0.04	2.7	-0.9	-2	3.21	11	19	4526	5.9	-0.9	-0.5	91.25	49	40.3
1375	641404	5377342	0.1	2.3	-0.9	-2	3.84	13	40	2268	14.0	-0.9	-0.5	276.31	42	44.93
1376	645106	5376945	0.13	1.9	-0.9	-2	2.74	12	27	1786	10.8	-0.9	-0.5	595.69	51	43.56
1377	646521	5377940	0.11	2.1	-0.9	-2	3.88	22	29	5313	12.1	-0.9	-0.5	425.44	52	35.96
1378	648677	5379264	0.22	3.4	-0.9	-2	6.72	28	32	17746	10.9	-0.9	-0.5	536.1	114	35.98
1379	652251	5377915	NM	2.4	INF	-2	NM	NM	NM	NM	NM	INF	INF	NM	NM	NM
1380	655348	5377493	0.08	1.8	INF	-2	6.68	16	20	7475	12.9	INF	INF	176.42	69	67.12
1381	655223	5378156	0.12	2.3	INF	-2	9.19	25	34	8796	16.1	INF	INF	415.11	84	61.3
1382	656360	5378625	0.12	1.9	-0.9	-2	11.4	20	37	5792	20.3	-0.9	-0.5	351.21	52	62.95
1383	656452	5379198	0.08	1.8	-0.9	-2	5.69	15	32	2987	18.7	-0.9	-0.5	353.03	42	55.04
1384	657155	5377503	0.06	1.9	-0.9	-2	7.19	12	31	3814	15.1	-0.9	-0.5	160.82	43	50.08
1385	657280	5378600	0.09	3.1	-0.9	-2	6.31	18	45	4772	13.3	-0.9	-0.5	238.01	43	45.16
1386	657884	5379586	0.13	2.4	-0.9	-2	6.3	17	32	7118	12.9	-0.9	-0.5	197.16	47	54.9

Site	Easting	Northing	Ag	As	Au	Au	Co	Cr	Cu	Fe	Ni	Pd	Pt	Total	Zn	LOI
	NAD 27	Method----->	ICP-MS	INAA	FA	INAA	ICP-MS	ICP-OES	ICP-OES	ICP-OES	ICP-MS	FA	FA	REEs	ICP-OES	Grav.
	UTM Zone 16	Units----->	ppm	ppm	ppb	ppb	ppm	ppm	ppm	ppm	ppm	ppb	ppb	La to Lu	ppm	%
		D. L.----->	0.02	0.5	0.9	2	0.05	4	5	5	0.5	0.9	0.5		2	0.05
1387	654547	5376267	0.1	1.9	INF	-2	3.19	12	37	3038	9.4	INF	INF	238.25	46	67.96
1388	653549	5376674	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1389	652197	5376785	0.09	2.1	-0.9	-2	4.03	19	33	9194	9.6	-0.9	-0.5	242.9	57	31.94
1390	652389	5377156	0.1	6.8	-0.9	-2	3.22	15	28	7386	9.0	-0.9	-0.5	157.48	74	55.45
1391	653069	5377947	0.06	1.5	-0.9	-2	4.21	25	22	8838	12.5	-0.9	-0.5	182.07	51	30.59
1392	653662	5379011	0.09	1.7	-0.9	-2	5.57	29	18	15191	12.1	-0.9	-0.5	183.48	51	14.35
1393	651437	5377829	0.07	1.8	-0.9	-2	2.42	8	32	1593	4.9	-0.9	-0.5	350.15	56	51.59
1394	651140	5378118	0.09	3.6	-0.9	-2	1.94	14	59	3115	7.8	-0.9	-0.5	268.95	78	44.51
1395	649903	5375659	0.04	3	-0.9	-2	2.06	8	19	1979	7.1	-0.9	-0.5	94.34	44	59.67
1396	649893	5376757	0.07	1.9	-0.9	-2	2.08	7	23	2072	5.6	-0.9	-0.5	440.22	55	43.51
1397	649347	5376915	0.04	2.4	-0.9	-2	1.22	10	23	2645	5.4	-0.9	1.54	177.7	43	37.81
1398	649806	5377743	0.07	2.2	-0.9	-2	1.64	12	33	2010	8.0	-0.9	-0.5	433.64	36	32.54
1399	648276	5376814	0.02	2.3	INF	-2	1.63	4	14	1923	5.3	INF	INF	19.93	38	80.2
1400	647413	5378526	0.16	2.7	-0.9	-2	6.69	36	47	11718	17.8	-0.9	-0.5	555.41	101	48.51
1401	647371	5379437	0.18	4.3	-0.9	-2	7.98	31	34	34028	8.7	-0.9	-0.5	471.65	90	50.74
1402	647084	5379527	0.19	2.9	-0.9	-2	5.5	18	64	2635	14.7	-0.9	-0.5	647.08	58	44.45
1403	646397	5379215	0.1	2.2	-0.9	-2	4.96	12	29	3135	8.4	-0.9	-0.5	424.15	64	53.5
1404	645667	5378507	0.04	1.6	-0.9	-2	5.03	15	22	3441	11.8	-0.9	-0.5	289.29	42	46.18
1405	642190	5376201	0.18	1.9	-0.9	-2	9.19	16	37	4886	14.0	-0.9	-0.5	197.58	107	57.47
1406	642000	5376509	0.2	1	-0.9	-2	6.75	17	36	3512	21.7	-0.9	-0.5	245.8	52	50.58
1407	642298	5376724	0.11	3	-0.9	-2	4.2	15	37	3736	11.4	-0.9	-0.5	353.35	37	39.23
1408	643312	5377211	0.1	2.2	INF	-2	5.83	25	37	3757	19.8	INF	INF	276.46	49	49.58
1409	644176	5377917	0.08	1.3	-0.9	-2	4.09	17	27	4317	11.3	-0.9	-0.5	401.7	43	39.66
1410	644824	5378537	0.12	2.2	48.78	-2	6.28	16	32	2724	17.0	-0.9	-0.5	297.76	41	46.27
1411	645289	5378808	0.14	0.8	1.31	-2	2.79	7	29	2020	14.3	-0.9	-0.5	112.48	45	64.59
1412	644278	5379698	0.11	1.9	INF	-2	5.57	20	29	3578	15.0	INF	INF	285.84	50	61.06
1413	642161	5378702	0.04	2.5	-0.9	-2	3.21	19	29	6826	9.4	-0.9	-0.5	210.76	42	21.97
1414	641186	5378384	0.03	1.7	-0.9	-2	2.06	5	26	1039	6.0	-0.9	-0.5	136.05	31	41.52
1415	639641	5377714	0.05	1.3	-0.9	-2	4.34	14	18	4582	8.8	-0.9	-0.5	175.2	39	39.82
1416	640075	5378134	0.08	1.2	-0.9	-2	3.41	11	33	2633	16.0	-0.9	-0.5	321.84	24	35.42
1417	638797	5377491	0.06	2.3	-0.9	-2	3.96	16	24	4853	9.9	-0.9	-0.5	169.27	40	41.09
1418	638219	5378742	0.04	2.1	-0.9	-2	3.67	10	22	2654	9.5	-0.9	-0.5	48.09	52	66.79
1419	637502	5378296	0.06	INF	INF	INF	2.47	18	18	4910	10.4	INF	INF	43.95	91	61.16
1420	637245	5378266	0.23	4	-0.9	-2	5.7	43	169	7263	27.5	1.99	0.89	81.74	83	46.94
1421	636700	5378277	NM	7.3	INF	-2	NM	NM	NM	NM	NM	INF	INF	NM	NM	NM
1422	636321	5377651	0.04	3.6	INF	-2	1.62	19	7	2228	9.7	INF	INF	17.75	65	71.45
1423	635806	5377552	0.05	3.3	INF	-2	2.24	11	21	4833	6.5	INF	INF	31.47	76	79.37
1424	629553	5377741	0.07	3	-0.9	-2	6.36	29	21	12781	12.5	-0.9	-0.5	147.21	73	24.5
1425	636930	5377172	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1426	645123	5374550	0.05	1.4	-0.9	-2	4.95	27	13	14036	11.3	-0.9	-0.5	162.64	51	11.46
1427	647257	5375854	0.03	1.2	-0.9	-2	4.23	18	9	9604	7.2	-0.9	-0.5	106.61	30	4.88
1428	652915	5374079	0.05	2.1	-0.9	-2	4.89	20	13	8320	10.0	-0.9	-0.5	144.14	59	29.04
1429	654313	5375056	0.02	1.6	-0.9	-2	2.94	11	20	4935	11.7	-0.9	-0.5	207.85	54	52.24
1430	655608	5374678	0.08	2.5	-0.9	-2	5.58	16	20	5656	10.3	-0.9	1.41	195.34	57	41.18
1431	657085	5374105	0.13	3	-0.9	-2	5.43	17	25	7237	11.4	-0.9	-0.5	185.02	58	55.37
1432	657806	5374355	0.09	2.7	-0.9	-2	6.96	15	31	4057	13.1	-0.9	-0.5	202.29	48	66.28
1433	658906	5375046	0.05	2.6	INF	-2	4.22	13	23	4250	8.1	INF	INF	129.03	43	66
1434	649955	5374051	0.04	3.6	-0.9	-2	2.84	18	27	6399	10.3	-0.9	0.6	95.23	46	37.36
1435	650557	5374836	0.1	4.8	8.31	-2	5.8	23	19	24056	9.8	-0.9	-0.5	173.43	76	33.82
1436	651472	5376135	0.1	6.4	INF	-2	4.43	24	31	10691	11.8	INF	INF	151.7	77	45.66
1437	651932	5376018	0.08	5.2	-0.9	-2	3.81	17	39	16685	7.4	-0.9	-0.5	294.38	63	41.33
1438	652663	5376124	0.11	3.5	INF	-2	5.72	20	47	3724	16.4	INF	INF	305.4	88	74.24
1439	652688	5375533	0.06	1.6	-0.9	-2	3.55	10	18	2343	11.1	-0.9	-0.5	131.5	32	50.66
1440	648666	5375104	0.05	2.2	-0.9	-2	1.19	8	19	1872	6.0	-0.9	-0.5	83	37	40.81
1441	648347	5374466	0.11	1.6	-0.9	-2	3.82	11	29	1592	11.6	-0.9	-0.5	224.13	53	50.73
1442	645808	5376118	0.08	4	INF	-2	1.73	12	44	2641	8.9	INF	INF	57.54	82	68.37
1443	643262	5373548	0.05	1.9	-0.9	-2	3.69	22	16	9253	10.5	-0.9	-0.5	140.64	39	22.69
1444	638608	5373934	0.06	4.2	-0.9	-2	2.6	20	21	5637	10.7	-0.9	0.76	107.27	40	36.78
1445	638881	5374069	0.13	3.3	-0.9	-2	4.31	16	33	7713	9.5	-0.9	-0.5	126.9	72	42.95
1446	639183	5375543	0.08	2.1	-0.9	-2	2.76	12	25	3390	11.2	-0.9	-0.5	116.62	31	39.19
1447	638395	5376404	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1448	636641	5375684	0.04	1.8	-0.9	-2	2.86	14	22	4806	6.9	-0.9	-0.5	92.05	27	20.45
1449	636873	5373905	0.26	4.5	-0.9	-2	2.03	33	78	5158	11.7	-0.9	-0.5	163.04	46	35.27

Site	Easting NAD 27 UTM Zone 16	Northing Method----->>> Units----->>> D. L.----->>	Ag ICP-MS ppm 0.02	As INAA ppm 0.5	Au FA ppb 0.9	Au INAA ppb 2	Co ICP-MS ppm 0.05	Cr ICP-OES ppm 4	Cu ICP-OES ppm 5	Fe ICP-OES ppm 5	Ni ICP-MS ppm 0.5	Pd FA ppb 0.9	Pt FA ppb 0.5	Total REEs La to Lu	Zn ICP-OES ppm 2	LOI Grav. % 0.05
1450	635937	5373706	0.13	1.8	-0.9	-2	2.27	13	69	3010	9.2	-0.9	-0.5	344.35	36	34.44
1451	632568	5373679	0.08	0.9	-0.9	-2	4.28	12	18	3927	9.0	-0.9	-0.5	121.07	61	57.26
1452	632289	5373750	0.1	1	-0.9	-2	6.74	11	16	2328	13.3	-0.9	-0.5	160.73	41	60.09
1453	632413	5374244	0.11	2.2	INF	-2	4.5	19	25	5220	11.2	INF	INF	206.45	72	69.36
1454	631785	5374572	0.12	3.3	-0.9	-2	7.55	14	20	9410	9.8	-0.9	0.71	174.93	67	60.8
1455	631082	5373816	0.06	1.5	-0.9	-2	1.99	11	22	2588	7.6	-0.9	-0.5	303.74	27	28.69
1456	633424	5373856	0.15	3.8	0.92	-2	5.38	15	30	14074	9.5	-0.9	-0.5	172.82	62	51.82
1457	633107	5375172	0.08	2.6	-0.9	-2	2.33	14	54	6035	9.3	-0.9	-0.5	162.1	51	37.5
1458	634408	5374487	0.08	0.9	-0.9	-2	4.13	10	16	3484	11.2	-0.9	-0.5	169.87	36	49.06
1459	634032	5374773	0.15	0.9	-0.9	-2	2.89	15	34	3778	8.3	-0.9	-0.5	166.18	59	35.99
1460	630625	5375592	0.08	2.1	-0.9	-2	4.22	18	25	9072	7.2	-0.9	-0.5	203.65	46	44.33
1461	630855	5375954	0.09	5.1	1.51	-2	5.17	25	47	10447	14.5	-0.9	-0.5	170.33	65	49.26
1462	631459	5376633	0.07	7	-0.9	-2	3.15	21	56	7405	15.7	-0.9	0.65	114.38	48	53.99
1463	632485	5377233	0.03	2.8	INF	-2	1.54	10	32	1980	9.6	INF	INF	41.37	45	64.35
1464	626214	5379802	0.08	2	INF	6	1.89	13	15	3079	7.6	INF	INF	39.29	83	68.19
1465	626826	5380191	0.03	5.5	-0.9	-2	2.37	19	24	4501	8.3	-0.9	-0.5	104.64	26	32.21
1466	621718	5376727	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1467	621878	5377186	0.11	2.5	-0.9	-2	4.58	17	29	5803	12.1	-0.9	-0.5	230.91	43	37.11

Notes: Geochemical results below detection limit are indicated with minus (-) sign;
ICP-OES = Inductively Coupled Plasma Optical Emission Spectroscopy
ICP-MS = Inductively Coupled Plasma Mass Spectroscopy;
INAA = Instrumental Neutron Activation Analysis;
FA = Fire Assay;
D.L. = Detection limit;
INF = Insufficient sample material;
NM = Not measured;
QC = Quality control problem;
NS = No sample

Metric Conversion Table

Conversion from SI to Imperial			Conversion from Imperial to SI		
SI Unit	*Multiplied by*	*Gives*	*Imperial Unit*	*Multiplied by*	*Gives*
		LENGTH			
1 mm	0.039 37	inches	1 inch	**25.4**	mm
1 cm	0.393 70	inches	1 inch	**2.54**	cm
1 m	3.280 84	feet	1 foot	**0.304 8**	m
1 m	0.049 709	chains	1 chain	20.116 8	m
1 km	0.621 371	miles (statute)	1 mile (statute)	**1.609 344**	km
		AREA			
1 cm^2	0.155 0	square inches	1 square inch	**6.451 6**	cm^2
1 m^2	10.763 9	square feet	1 square foot	**0.092 903 04**	m^2
1 km^2	0.386 10	square miles	1 square mile	2.589 988	km^2
1 ha	2.471 054	acres	1 acre	0.404 685 6	ha
		VOLUME			
1 cm^3	0.061 023	cubic inches	1 cubic inch	**16.387 064**	cm^3
1 m^3	35.314 7	cubic feet	1 cubic foot	0.028 316 85	m^3
1 m^3	1.307 951	cubic yards	1 cubic yard	0.764 554 86	m^3
		CAPACITY			
1 L	1.759 755	pints	1 pint	0.568 261	L
1 L	0.879 877	quarts	1 quart	1.136 522	L
1 L	0.219 969	gallons	1 gallon	**4.546 090**	L
		MASS			
1 g	0.035 273 962	ounces (avdp)	1 ounce (avdp)	28.349 523	g
1 g	0.032 150 747	ounces (troy)	1 ounce (troy)	**31.103 476 8**	g
1 kg	2.204 622 6	pounds (avdp)	1 pound (avdp)	**0.453 592 37**	kg
1 kg	0.001 102 3	tons (short)	1 ton (short)	**907.184 74**	kg
1 t	1.102 311 3	tons (short)	1 ton (short)	**0.907 184 74**	t
1 kg	0.000 984 21	tons (long)	1 ton (long)	**1016.046 908 8**	kg
1 t	0.984 206 5	tons (long)	1 ton (long)	**1.016 046 90**	t
		CONCENTRATION			
1 g/t	0.029 166 6	ounce (troy)/ ton (short)	1 ounce (troy)/ ton (short)	34.285 714 2	g/t
1 g/t	0.583 333 33	pennyweights/ ton (short)	1 pennyweight/ ton (short)	1.714 285 7	g/t

OTHER USEFUL CONVERSION FACTORS

	Multiplied by	
1 ounce (troy) per ton (short)	31.103 477	grams per ton (short)
1 gram per ton (short)	0.032 151	ounces (troy) per ton (short)
1 ounce (troy) per ton (short)	20.0	pennyweights per ton (short)
1 pennyweight per ton (short)	0.05	ounces (troy) per ton (short)

Note: Conversion factors which are in bold type are exact. The conversion factors have been taken from or have been derived from factors given in the Metric Practice Guide for the Canadian Mining and Metallurgical Industries, published by the Mining Association of Canada in co-operation with the Coal Association of Canada.

MAPS NOT FILMED

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